Nova Scotia
Department of
Agriculture and Marketing

Annual Report
1991

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Nova Scotia

Department of
Agriculture and Marketing

Extension Services Branch

Mission Statement

Staff in the Extension Branch are primarily educators who offer high quality advice, information, service and educational programs to farmers/farm families, farm and rural organizations, agri-business and the public at large for the purpose of developing people, to promote and enhance a viable agricultural industry and to improve the quality of life for their clients.

1991 ANNUAL REPORT

EXTENSION SERVICES BRANCH

AGRICULTURE DEVELOPMENT DIVISION

The 1991 Annual Report provides an overview of the activities, special projects and programs of the four sections of the Extension Services Branch: Field Services; 4-H & Rural Youth; Home Economics and Engineering.

Staff of the Extension Services Branch continue to play a key role in the development of people and the agricultural industry in this province. The Extension Branch network provides an important link in delivering programs and information, contacting people and assisting with the adoption of new technology. Staff work closely with other branches, departments of government, farm and rural organizations and the general public to coordinate an effective extension program to our clients.

1991 was a year of change, challenges and uncertainty in the agricultural industry. Adverse weather conditions, poor crop yields, low commodity prices, safety net programs, GATT negotiations and the threat to the supply management system have all played a role in the difficult economic times for farmers. Extension personnel have emphasized a team or multi-disciplinary approach including good financial management, production efficiency, marketing information as well as careful planning and decision making to address these challenges for Nova Scotia farmers.

There were a number of staff changes in the Extension Branch during the past year. Laura Canning, Secretary, and Gordon Crowe, Agricultural Representative, Middle Musquodoboit District Office, retired December 31/90 and October 31/91 respectively. Barbara Headdy resigned her clerical position August, 1991, as well as Marlene MacDonald, Secretary, Antigonish, June, 1991. Bill Morley was transferred from Extension Engineering to the Nova Scotia Crop & Livestock Insurance Commission. Arthur Pick, Agricultural Representative, Bridgewater Office, was away on Educational Leave for a Masters program at the University of Alberta and Yvonne Thyssen-Post was granted Educational Leave for a Masters Program, St. Francis Xavier University, Antigonish.

New permanent staff in 1991 included Deborah Trenaman, Secretary, Middle Musquodoboit office. Bev Connell and Dean Manning assumed the responsibilities of Agricultural Representative for the Bridgewater and Middle Musquodoboit offices respectively. Casual employees included Mary Ann Oulton who assumed the responsibility for the 4-H program for the South Shore area and Jack Cox who assisted with the Agricultural Representative's program for the Bridgewater Office. The St. Peter's Office was closed following the retirement of Jack Hicks.

Finally, I want to thank Bob Bennett, Assistant Director, Supervisors and all Extension Services Staff for the support and assistance which I received during the past year as Director. Appreciation is also extended to Dick Huggard, Deputy Minister, Ralph Morehouse, retired Deputy Minister, Executive Directors, Branch Directors and all Department Staff for their cooperation and assistance.

Respectfully submitted,

David M Sangster

David M. Sangster, P.Ag.
Director

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STAFF OF EXTENSION SERVICES BRANCH
DECEMBER 31, 1991

D.M. Sangster, BSc (Agr.) M.Sc., P.Ag.
Director, Truro, N.S.

R.A. Bennett, B.S.A., P.Ag.
Asst. Director, Truro, N.S.

Margaret Johnson, Secretary
Truro, N.S.

AGRICULTURAL REPRESENTATIVES

George MacKenzie, BSc (Agr.), P.Ag.	Mgr. Field Services, Truro
Harvey MacDonald, BSc (Agr.), P.Ag.	Sydney
Leo Cox, Agriculture Fieldman,	Mabou
Donald L. MacDonald, BSc(Agr.), P.Ag.	Antigonish
James Neary, BSc (Agr.), P.Ag.	Nappan
Yvonne Thyssen-Post, BSc (Agr.), P.Ag.	Truro
Joe Calder, BSc (Agr.), P.Ag.	Pictou
Weldon Smith, BSc (Agr.), P. Ag.	Windsor
Fred Walsh, BSc (Agr.), P.Ag.	Kentville
Laurie Eils, BSc (Agr.), P.Ag.	Lawrencetown
Bruce Gilliatt, BSc (Agr.), P.Ag.	Weymouth
Robb MacMillan, BSc (Agr.),M.Agr. P.Ag.	Yarmouth

ASSISTANT AGRICULTURAL REPRESENTATIVES

Bev Connell, B.Sc (Agr.), M.Agr., P.Ag.	Kentville & Bridgewater
Dean Manning, BSc (Agr.), AIT	Middle Musquodoboit

4-H REPRESENTATIVES

Elizabeth Crouse, BSc (Agr.), P.Ag.	Supervisor, Truro
Lynn Thurber, BSc, P.Ag.	Bridgewater
Marianne Ward, BSc (Agr.), A.I.T.	Lawrencetown
Ruth Withrow, BSc (Agr.), P.Ag.	Windsor
Jeff Wentzell, BSc (Agr.) AIT	Pictou
Bill MacLeod, BSc (Agr.), P. Ag.	Truro
Alan Porter, BSc (Agr.), AIT	Sydney

HOME ECONOMISTS

Susan Horne, BSc (H.Ec.), P.Ag.	Supervisor, Truro
Gail Keddy, BSc (H.Ec.), P.Ag.	Truro
Marjorie Knowles, R.N., BSc (H.Ec.), P.Ag.	Kentville
Valorie Oickle, BSc (H.Ec.), AIT	Bridgewater
Jane Lewis, B.HEc, M.AEd., AIT	Sydney
Cheryl Butts-MacMillan, B.HEc	Mabou
Colleen MacNeil, BSc (H.Ec.)	Antigonish

AGRICULTURAL ENGINEERING DIVISION

John Higgins, BSc (Agr.), M.Sc., P.Eng., P.Ag.	Chief Engineer, Truro
Hank Kolstee, B.Eng. (Agr. Eng.), P.Eng.	Supervisor, Land Protection, Truro
Peter Swinkels, BSc (Agr. Eng.), P.Eng.	Supervisor, Technicial Services, Truro

AGRICULTURAL ENGINEERS

Laurie Cochrane, B.Eng. (Agr. Eng.), P.Eng.	Truro
David Browning, B.Eng (Agr. Eng.), P.Eng.	Truro
Carl Esau, B.Eng. (Agr. Eng.), P.Eng., P.Ag.	Truro
Trent Webster, BSc (Agr. Eng.), P.Eng., P. Ag.	Truro
Gary Bishop, BSc (Agr.), P.Eng., P. Ag.	Truro
Larry Honey, B.Eng. (Agr. Eng.), MSc., P.Eng., P.Ag.	Kentville

TECHNICIANS

Robert Lawrence,	N.S.L.S., Surveyor	Truro
Lindsay Carter	Aboiteau Supt.	Kentville
Brad Crewe	" "	Truro
Gary Gilbert	" "	Nappan
Ken Carroll	" "	Windsor
Gerard MacDonald	Agr. Technician	Truro
John Sullivan	" "	Truro
Bruce Curry	Draftsman	Truro
Dave Cameron	"	Kentville
Chris Curry	Land Imp. Insp.	Truro
John McCabe	" " "	Antigonish
Darrell Hingley	Surveyor's Asst.	Truro

CLERICAL STAFF

Carolyn Rushton	Truro
Susan Wilson	Truro
Michelle VanOirschot	4-H, Truro
Margie Clyke	Ext. Engineering, Truro
Linda Burchell	" " Truro
Carol Hudson	" " Truro
Cheryl Gillis	Sydney
Shirley MacDonald	Mabou
Laureen Boyd	Antigonish
Marie Matheson	Pictou
Sandra Strang	Nappan
Debra Trenaman	Middle Musq.
Dianne Johnson	Windsor
Cheryl Theriau	Kentville
Linda Fancy	Kentville
Donna Lombard	Kentville
Paulette Corkum	Bridgewater
Susan Bent	Lawrencetown
Vacant	Lawrencetown
Arlene Burton	Weymouth
Marie Thibodeau	Yarmouth

PERSONNEL

During 1991, the staff complement was constituted as follows:

Manager - Field Services	1
Agricultural Representatives	11
Asst. Agricultural Representative	2
Agricultural Fieldman	1
4-H Representatives	7
Agricultural Engineers	9
Home Economists	7
Technicians	12
Secretaries	22
Director & Asst. Director	2
TOTAL	74

Study Leave

Arthur Pick, BSc (Agr.) P. Ag. - Masters of Agr.
University of Alberta

Resignations

Gordon Crowe, BSc (Agr.), P. Ag. - Agr. Rep., Middle Musquodoboit
(Retired)

Barbara Heddy, - Stenographer, Lawrencetown

Transfers

To Crop and Livestock Insurance:

Bill Morley - Fieldman, Kentville

Nova Scotia

Department of
Agriculture and Marketing

Extension Services Branch

1991 ANNUAL REPORT

Field Services Section

FIELD SERVICES SECTION

INTRODUCTION:

The Agricultural Representative or Field Services Section continues to serve a broad range of rural clientele. Agricultural offices in fourteen locations across Nova Scotia provide information and a wide variety of services to farm families, agri-business and the general public.

During the year 1991 our staff consists of twelve Agricultural Representatives, 2 Assistant Agricultural Representatives, 1 Agricultural Fieldman, 16 Clerical and 1 Manager, Field Services.

County or area Agricultural Representatives are responsible for:

- providing a front line delivery system
- promotion of a viable agricultural industry
- managing a county office
- administration of assistance policies
- providing educational upgrading
- communication of technical information
- leadership in planning and development
- promotion of agricultural awareness
- monitoring the agricultural industry

PROGRAMS & SERVICES

Farm visits, office calls, meetings and tours enable staff to keep in close contact with their clients and provide the counselling, advice and information required for todays agricultural industry.

The following statistical summary provides an indication of the extent of the contact and activities carried out by the Agricultural Representative staff.

Table 1	1991	1990	1989	1988	1987
# Client Calls	5,138	5,557	5,008	5,896	6,320
# Office Calls	9,320	10,582	10,574	10,754	11,432
# Short Courses, Meetings & Tours	1,200	1,337	2,308	1,369	1,147
# People Attending Short Courses, Meetings & Tours	31,935	32,015	27,809	38,612	34,461
# Letters Written	18,901	14,793	14,856	17,988	13,144
# Publications & Circ. Dist.	30,163	37,148	29,303	31,694	37,414
# Radio Broadcasts	106	144	155	244	174

Introducing...

Cape Breton County and Richmond County

Some of the most picturesque shoreline in the province can be found in Cape Breton and Richmond Counties. Long lonely sand beaches stretch for miles along the coastline. Waves crash against rugged rock outcrops and small fishing boats bob around like toys. Inland there are brooks teeming with trout and woods abundant with deer.

The area was originally used as a fishing base for French, British and Spanish fleets in the 17th century. For several years Cape Breton alternated under French and British rule, being finally returned to the British in 1758. Today Cape Breton County is home to a large number of people of Scottish and Irish descent while Richmond County has a large Acadian population.

Farming has been traditionally combined with fishing and forestry by the people of the area. Most operations were small mixed farms located close to the industrial areas or part-time activities to supplement a fisherman's income. Dairy farming was the main operation, but most farms had some chickens, sheep and beef cattle too.

Agricultural development has been affected by the growth of the industrialized area in Cape Breton County, which provides the prime market for agricultural products. The City of Sydney and towns like Glace Bay have grown up around the coal and steel industries. As more work opened up in booming industrial Cape Breton, farmers left the country to work in the cities and towns. The farms became residential and recreational land.

Dairy production is the most important industry in Cape Breton/Richmond worth about $2.5 million in sales annually.

Poultry and vegetables account for much of the farm production in Cape Breton County. Small scale livestock enterprises are increasing with more emphasis on feed self-sufficiency. Cereal grains, berry crops, fur and greenhouse production are also found in the area.

RESOURCES

Climate

Growing Season (5°C): April 30 - Nov. 6 (190 days)

Frost Free Period (0°C):

Last Spring: May 15 - May 25
First Fall: Sept. 30 - Oct. 15
Duration: 140 - 150 days

Annual Precipitation: 1,400 - 1,450 mm

Growing Season Precipitation: 475 - 500 mm

Annual Degree Days Above 5°C: 1,400 - 1,600

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Cape Breton	Rich-mond	Province
No. of Farms	128	33	4,283
Under $2,500	34	15	1,113
$2,500 - $4,999	13	9	567
$5,000 - $9,999	21	2	578
$10,000 - $24,999	18	2	641
$25,000 - $49,999	10	2	316
$50,000 - $99,999	17	2	333
$100,000 - $249,999	9	0	466
$250,000 & Over	6	1	269

Farms Classified by Major Product
(Source: 1986 Census)

	Cape Breton	Rich-mond	Province
Dairy	25	2	698
Cattle	19	8	979
Hogs	0	0	132
Poultry	5	0	127
Grain	3	0	63
Other Crops	1	0	45
Fruit	4	1	367
Vegetables	7	0	90
Misc. Specialty	21	7	481
Mixed	9	0	188
Total Farms	94	18	3,170

Field Crops Hectares
(Source: 1986 Census)

	Cape Breton	Rich-mond	Province
Oats	55	n/a	5,230
Hay	1,878	240	68,398
Potatoes	16	n/a	1,633

1 hectare = 2.47 acres

Land & Soil

	Cape Breton	Richmond	Total
Total Land Area (ha) [1]:	314,328	140,368	454,696
Classes 2,3,4 Soil (ha) [2]:	69,911	34,081	103,992
Percentage of [2] to [1]:	%	24%	23%

1991 IN REVIEW

- The dry growing season affected forage crops, reduced vegetable and berry crop yields.
- Staff in the Sydney office work closely as a team that includes E.C.B.C. staff and specialists with the Federation of Agriculture.
- Farmers continue to promote agriculture awareness by speaking to schools, groups, and welcoming farm tours. The Agricultural Awareness booth (McDonaldland) at the Cape Breton Exhibition was well received.
- Farmers are only applying for programs they need, not because they are available. This reflects the economic climate. The AFDA Comprehensive Farm Development Program is getting more use.
- Five community fairs continue to be held. They are an important event in the various areas and serve as an agricultural awareness function.
- The Cape Breton Exhibition had a good year in 1991, upgrading and expanding facilities.
- The Federation of Agriculture was active with involvement in the Point Aconi power project, co-ordinating forage and straw supplies, tours, trials and a plowing match.
- The Mira Pasture Co-op had one of its best years to-date due to a newly installed water system.
- The Richmond County Agricultural Association remains active, sponsoring P.E.P. projects, commodity up-date meetings, etc.
- Jack Hicks, Special Projects Officer, retired in 1991 and the St. Peter's Office was closed.
- There was little change in the dairy and poultry, tree and fruit commodities - beef and sheep numbers increased mainly due to the AFDA & ALFI programs.
- The weather situation affected production of small fruits and vegetables. Vegetable acreage continues to expand. One grower shipped two trailer loads of cabbage to the Chicago market.
- There is still expansion in the greenhouse sector, mainly bedding plants, tomatoes and ornamentals.
- Sod farming continues to increase acreage.
- There is a steady improvement in the quality of forages grown and stored.
- The number of beekeepers is declining but there is an increase in hives. One producer now has over 200 hives and won most of the awards at the Atlantic Winter Fair.
- The fur industry reduced its numbers due to market conditions but has retained quality.

Introducing...

Inverness County and Victoria County

Inverness and Victoria Counties are known for some of best scenery in the world. Huge mountain hills rise into the mist over a thousand feet above sea level while the rocky shoreline tumbles into the ocean below.

Cape Breton Island was originally used as a base for French, British and Spanish fishing fleets. The first settlement on the west coast was established at Cheticamp In 1786 and most of the small communities that sprung up along coastal Inverness County were French Acadian.

Victoria County was settled mainly by hardy Scottish immigrants between 1770 and 1830. Clearing the land was tedious work. They cut trees, removed the roots and rocks, and tilled the ground. In desperation some attempted to burn the trees, often with disastrous results.

The early settlers spent long hours tanning their own leather to make harnesses and footwear. They also sheared the sheep, and washed, carded, spinned and knitted or wove wool.

Farming, fishing and lumbering are still the main economic activities in the area.

Most of the land in Victoria County is more suited to pastureland and forestry than the cultivation of field crops. However, there are some extremely fertile sections like Boularderie Island where a variety of crops are grown.

Inverness County supplies milk and other livestock products to industrial Cape Breton. More than 6,000 acres of hay are cultivated annually as well as some wheat, oats and barley. In recent years maple syrup production has increased with several new operations having been established.

The concentration of population around the Sydney area provides a substantial market for agricultural products from Inverness and Victoria counties.

RESOURCES

Climate

Growing Season (5°C): April 30 - Nov. 6 (190 days)

Frost Free Period (0°C):

Last Spring: May 30 - June 14
First Fall: Sept. 15 - Oct. 15
Duration: 90 - 130 days

Annual Precipitation: 1,400 - 1,600 mm

Growing Season Precipitation: 450 - 500 mm

Annual Degree Days Above 5°C: 1,600 - 1,700

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Inverness	Victoria	Province
No. of Farms	155	50	4,283
Under $2,500	59	14	1,113
$2,500 - $4,999	16	7	567
$5,000 - $9,999	22	8	578
$10,000 - $24,999	19	9	641
$25,000 - $49,999	10	6	316
$50,000 - $99,999	7	2	333
$100,000 - $249,999	16	4	466
$250,000 & Over	6	0	269

Farms Classified by Major Product
(Source: 1986 Census)

	Inverness	Victoria	Province
Dairy	25	8	698
Cattle	46	8	979
Hogs	0	0	132
Poultry	1	0	127
Grain	2	0	63
Other Crops	1	1	45
Fruit	3	0	367
Vegetables	0	1	90
Misc. Specialty	16	15	481
Mixed	2	3	188
Total Farms	96	36	3,170

Field Crops Hectares
(Source: 1986 Census)

	Inverness	Victoria	Province
Wheat	16	0	n/a
Oats	42	n/a	5,230
Barley	48	n/a	4,823
Hay	2,721	500	68,398

1 hectare = 2.47 acres

Land & Soil

	Inverness	Victoria	Total
Total Land Area(ha)[1]	415,004	307,499	722,503
Classes 2,3,4 Soil (ha) [2]*	111,097	32,642	143,739
Percentage of [2] to [1]	27%	11%	20%

1991 IN REVIEW

- Agriculture in the region remained basically unchanged as to farm numbers.
- Dry weather reduced yields but forage quality was excellent. Much of the hay is stored in large round bales. More producers are moving to grass haylage.
- Dairy is the major commodity in the region. Quota, both MSQ and fluid increased through purchase.
- Producers of milk have taken the attitude concerning Article 11 of GATT, that they will worry about it when it happens.
- Producers have increased productivity per cow, reduced feed costs and improved the type in their herds.
- Beef farm numbers decreased slightly but cattle numbers continue to increase.
- Due to low prices for finished cattle most of the calves were sold to outside buyers as feeders.
- There is still a very large differential in total dollars received for feeder calves. The use of bulls from the test station, and exotic bulls are correcting the situation.
- The sheep industry is in constant decline; down to 700 ewes. The coyote is credited with this demise.
- The fur industry has bottomed out but there is some renewed interest.
- The Atlantic Fox Show in North Sydney was very successful.
- Strawberry, greenhouse, blueberry and maple producers, though small in number, had a fairly good year, and continue to expand.
- Winter kitchen meetings were held throughout the area with excellent participation. Various topics were discussed.
- Considerable use is made of the AFDA Comprehensive Farm Development Program, and other assistance programs. Much of the extension work is on a one-to-one basis.
- The Inverness Federation of Agriculture purchased a new combine, Brillion seeder, and platform scales, for use in the county.
- The Soil & Crop Committee was very active with grain and forage trials, demonstrations, and tours.

Introducing...

Antigonish County and Guysborough County

The first European visitors to the shores of Antigonish and Guysborough counties were attracted by the wealthy fishing grounds of the Northumberland Strait, St. George's Bay and Strait of Canso. They were followed by more permanent Acadian French, Scots, Irish and New Englanders. Many had fled religious or political persecution, while others merely wanted a better way of life.

These early pioneers struggled to clear the land which was thick with trees. Land was not cleared particularly well in those early days. In fact, most farmers cultivated right around the tree stumps. While they were eventually able to grow hay, wheat and potatoes as well as raise cattle, horses and sheep, most supplemented their farm production with wild game and fish.

Today lumbering, fishing and farming are the most important sources of income in both counties. The $8 million dairy industry in Antigonish-Guysborough ranks third in the province. There are also seven poultry and and four hog producers.

There is a wide range of soils - the land alongside the rivers being particularly fertile. There are about 25 blueberry producers and six commercial strawberry producers.

Newfoundland was the main market for agricultural produce in the early 1800's and farmers often lost money on the transportation costs. The construction of the railway through the region in the late 1800's, the establishment of a car ferry service, and the completion of the Canso Causeway in 1955 opened up new market opportunities in Cape Breton. The causeway also created one of the best natural year-round ice-free harbours on the continent in the Strait of Canso.

During the 1950's and 1960's the arrival of a large number of farm families from the Netherlands contributed to the growth and development of agriculture, especially in Antigonish County.

RESOURCES

Climate

Growing Season (5°C): April 25 - Nov. 6
(195 days)

Frost Free Period (0°C):
Last Spring: May 15 - June 14
First Fall: Sept. 15 - Oct. 15
Duration: 90 - 150 days

Annual Precipitation: 1,200 - 1,400 mm

Growing Season Precipitation: 400 - 475 mm

Annual Degree Days Above 5°C: 1,400 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Anti-gonish	Guys-borough	Province
No. of Farms	217	56	4,283
Under $2,500	42	20	1,113
$2,500 - $4,999	29	13	567
$5,000 - $9,999	29	8	578
$10,000 - $24,999	38	10	641
$25,000 - $49,999	16	2	316
$50,000 - $99,999	17	1	333
$100,000 - $249,999	35	2	466
$250,000 & Over	11	0	269

Farms Classified by Major Product
(Source: 1986 Census)

	Anti-gonish	Guys-borough	Province
Dairy	56	6	698
Cattle	61	19	979
Hogs	6	0	132
Poultry	6	1	127
Grain	3	0	63
Other Crops	1	0	45
Fruit	12	4	367
Vegetables	1	0	90
Misc. Specialty	24	6	481
Mixed	5	0	183
Total Farms	175	36	3,170

Field Crops Hectares
(Source: 1986 Census)

	Anti-gonish	Guys-borough	Province
Wheat	25	n/a	n/a
Oats	240	15	5,230
Barley	210	21	4,823
Mixed Grain	51	n/a	n/a
Hay	5,750	647	68,398

1 hectare = 2.47 acres

Land & Soil

	Antigonish	Guysborough	Total
Total Land Area (ha)[1]	145,309	424,259	569,568
Classes 2,3,4 Soil (ha)[2]*	87,001	57,528	144,529
Percentage of [2] to [1]	60%	14%	25%

*According to the Canada Land Inventory Classification system, the soils designated as Class 2, 3, or 4 are suitable for commercial agriculture. Class 2 is highly productive, Class 3 moderately productive, and Class 4 the least productive of the three. Class 4 usually requires some improvements like clearing of bush, cultivation methods or water control.

1991 IN REVIEW

- A cautious year for all segments of agriculture. The long drought caused great concern regarding a winter feed supply.

- Dairy farming remains the major commodity in this region. Numbers remained constant, but milk production per cow increased substantially due to more culling, better genetics and improved feeding. Many are flushing cows or buying embryos to improve genetics.

- The Comprehensive and Beef Development programs are being used heavily by beef producers. These producers are placing more emphasis on financial management.

- Hog numbers also remains constant despite low prices. Producers have become very efficient in order to stay in business.

- The coyote has reduced the sheep population down to a few flocks. Those left have fenced for coyote control, or made use of donkeys.

- Fur ranchers have reduced their herds and some smaller operators have left the business due to low returns.

- Blueberry producers had a good year. Many are levelling land for mechanical harvesting.

- Strawberry acreage remained constant but the dry weather reduced yields.

- An educational meeting featuring Dr. Randy Shaffers from the U.S.A. on silage harvesting and storing was one of the best ever held in the area. This had led to considerable improvements in silage quality.

- The Federation of Agriculture continues to be very active. The Farm of the Year Award went to Wayne and Ann MacDougall and Family, West River.

- The Soil & Crop Association has 75 active members. There has been a continued move to storing forage as silage. Pasture trials with Sonja White Clover show considerable promise.

- The Eastern N.S. Holstein Club continues to be very active. They had an excellent show at the Exhibition, hosted the N.S. Annual Meeting, Highland Harvest Classic Sale, Futurity show, barn meetings and judging schools.

- Less land is being cleared and more underdrainage carried out. There is a continued interest in the manure storage program - a costly venture on most farms.

- An Antigonish-Guysborough Cattlemen's Association is still in the organizational state.

Introducing...

Pictou County

Pictou County was originally settled by Scottish and English settlers in the late 1700's. These people found lumbering at first more profitable than agriculture and worked the soil only to grow food for their immediate needs.

In 1820, markets began to expand with improved transportation and the development of mining and manufacturing. Farming became more profitable, so people began to expand their agricultural pursuits.

The era of coal mining beginning in 1827 as well as a booming timber trade and shipbuilding industry attracted people to the area from across the province and overseas.

However, agriculture remained the dominant activity and the largest employer. Canada's first census in 1871 indicated a population of 32,114 in Pictou County with farming listed as the occupation of more than 50% of those employed.

Agriculture attracted settlers into the rural areas of the county and held its position of economic importance until the 1880's. In the late 19th century, Pictou became a leader in heavy industry and attracted several manufacturing businesses. This included agriculture-related industries like tobacco processing, the manufacture of agricultural implements, cheese, and textiles.

As the 20th century approached, however, the construction of railways opened up more superior agricultural areas in the interior of the continent.. Thus began the dramatic decline in the county's agriculture industry. In 1911 there were 3,474 farms covering an area of 364,957 acres. By 1986 that number had dropped to 383 farms on 88,479 acres.

While agriculture is not as extensive in Pictou County as it was a century ago, it still has an important role to play. Soil and climate provide an opportunity to produce a wide variety of crops and livestock for local and provincial markets.

RESOURCES

Climate

Growing Season (5°C): April 25 - Nov. 1 (190 days)

Frost Free Period (0°C):

Last Spring: May 30 - June 14
First Fall: Sept. 15 - Oct. 15
Duration: 90 - 110 days

Annual Precipitation: 1,100 - 1,300 mm
Growing Season Precipitation: 400 - 450 mm
Annual Degree Days Above 5°C: 1,700 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Pictou	Province
No. of Farms	383	4,283
Under $2,500	115	1,113
$2,500 - $4,999	55	567
$5,000 - $9,999	60	578
$10,000 - $24,999	46	641
$25,000 - $49,999	33	316
$50,000 - $99,999	30	333
$100,000 - $249,999	41	466
$250,000 & Over	3	269

Farms Classified by Major Product
(Source: 1986 Census)

	Pictou	Province
Dairy	80	698
Cattle	94	979
Hogs	9	132
Poultry	2	127
Grain	9	63
Other Crops	2	45
Fruit	21	367
Vegetables	4	90
Misc. Specialty	34	481
Mixed	13	188
Total Farms	268	3,170

Field Crop Hectares
(Source: 1986 Census)

	Pictou	Province
Wheat	178	n/a
Oats	596	5,230
Barley	543	4,823
Mixed Grain	104	n/a
Hay	6,608	68,398
Corn: (Ensilage)	134	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 288,242 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 137,724 ha
Percentage of Agricultural Land to Total Land Area: 48%

1991 IN REVIEW

- "Challenging", best describes the overall picture of agriculture in Pictou County. Clouds of uncertainty hover over the supply managed sector.
- Despite this, agriculture remains sound, due to the determination and commitment of producers and their organizations.
- Dairy is the dominant sector. Three small producers left the industry. Modernization and adaption of new technology continued but at a slower rate.
- The dry weather caused pastures to dry up during the summer and left feed shortages in storage. Beef cow numbers, which had been increasing, were reduced slightly.
- Beef producers were discouraged with prices received for finished cattle. Feeder prices were stable.
- Continued expansion is taking place under the AFDA Comprehensive Farm Development program.
- Cattle came off the Cape John Pasture with good weight gains.
- No major developments in the hog, poultry, fur and sheep sectors.
- Strawberries yields were down, but prices were stable.
- Blueberry growers experienced one of their best years ever. More fields are being harvested mechanically.
- Vegetables also managed a stable year, despite the weather conditions. Some irrigation equipment was purchased. Much of the produce is marketed through farm and roadside markets.
- First cut forages yielded half of normal, but second and third crops were good.
- Much of the grain crop went into silage, causing a shortage of straw.
- The Pictou County Cattle Producers were very active with information updates, tours, and social activities.
- The Pictou County Soil & Crop Association held dairy and forage updates, video night and a ploughing match.

Introducing...

Colchester County

The geography of Colchester County has played a major role in shaping much of its destiny.

The early Acadian settlers were attracted by the extensive marshes of the area, the superior quality of the uplands and the central location. Like their countrymen at Port Royal and Grand Pre, they successfully dyked and farmed the marshes and cleared the uplands. They planted wheat, barley, rye, oats, hemp, peas, cabbage and flax.

In 1755, following the expulsion of the Acadians, New England Planters of Scottish and Irish descent as well as immigrants from Ireland settled the abandoned farms. Then, at the close of the 18th century, a large wave of United Empire Loyalists swept in from the United States.

Farming remained the major occupation in Colchester County. In 1827 it was estimated that 29,135 acres were under cultivation with an estimated 8,000 acres in the Stewiacke-Brookfield area alone. A number of agriculture-related industries like grist mills and tanneries were established. By the end of the 1800's, the Town of Truro boasted a condensed milk plant, a textile and woollen mill, a soap factory, and a feed and flour mill.

Agriculture is the most important resource industry in Colchester County today. It has become more specialized and diversified, but continues to be the mainstay for much of the county. The Town of Truro has become a supply and service centre for central and north-eastern Nova Scotia.

Colchester County has the largest concentration of dairy farms in Nova Scotia and almost all crops and livestock are produced within its boundaries. Lowbush blueberries and carrots for processing have increased in acreage in recent years.

RESOURCES

Climate

Growing Season (5°C): April 24 - Nov. 1 (191 days)

Frost Free Period (0°C):

Last Spring: May 30 - June 14
First Fall: Sept. 15
Duration: 90 - 110 days

Annual Precipitation: 1,100 - 1,300 mm
Growing Season Precipitation: 400 - 450 mm
Annual Degree Days Above 5°C: 1,600 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Colchester	Province
No. of Farms	522	4,283
Under $2,500	126	1,113
$2,500 - $4,999	77	567
$5,000 - $9,999	77	578
$10,000 - $24,999	69	641
$25,000 - $49,999	38	316
$50,000 - $99,999	34	333
$100,000 - $249,999	76	466
$250,000 & Over	25	269

Farms Classified by Major Product
(Source: 1986 Census)

	Colchester	Province
Dairy	125	698
Cattle	126	979
Hogs	13	132
Poultry	4	127
Grain	10	63
Other Crops	1	45
Fruit	45	367
Vegetables	6	90
Misc. Specialty	44	481
Mixed	22	188
Total Farms	396	3,170

Field Crops Hectares
(Source: 1986 Census)

	Colchester	Province
Wheat	157	n/a
Oats	857	5,230
Barley	767	4,823
Mixed Grain	200	n/a
Hay	9,992	68,398
Corn:		
Grain	175	1,976
Ensilage	505	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 364,124 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 175,812 ha
Percentage of Agricultural Land to Total Land Area: 48%

1991 IN REVIEW

- 1991 will be remembered as a year of uncertainty due to possible outcome of GATT talks, tougher economic times, the dry growing season, and extremely wet fall.

- The trend towards round bale silage through custom operators is continuing. This is very worthwhile in cases of emergency or poor drying weather.

- Tom VanOirschot, Municipal Weed Inspector, continues to make the public aware of the importance of weed control. A pesticide survey was done in 1991, in hope of getting rid of old or unwanted chemicals.

- Dairy is by far the main commodity in this area. Two producers left the industry, but others continued to purchase quota. They are concerned over GATT, but most realize they must become more competitive.

- The western part of the county supports considerable cash crop production. Carrots are produced for Oxford Frozen Foods in an area where livestock production is limited.

- Blueberries did well in 1991. Good yields and better prices. Several producers have purchased mechanical harvesters.

- Two strawberry plant nurseries continue to operate with increased sales to Florida. One developed a machine to harvest plants in 1991.

- The beef sector has the largest number of farmers and remained fairly stable in 1991. The shortage of feed this winter will reduce cattle numbers. They continue to make good use of the AFDA-Comprehensive Farm Plan Program.

- There is some renewed optimism in the fur industry. Breeding numbers are down but producer numbers are holding.

- The swine industry has remained stable with little or no capital improvements being done. The sheep numbers have also remained constant.

- Greenhouse producers selling landscape and bedding plants had another successful season. Several are under the AFDA- Comprehensive Farm Development Program.

- New technology introduced include floatation tires; progesterone testing; silo restoration; robotic hoe, etc.

- All programs organized and conducted in the county are in cooperation with producers groups, federations or other branches of the department.

- Colchester is unique in that it has four district federations within the county federation. All continue to be very active, especially in local projects.

- The Kiwanis Farm Family Award went to Franklyn Fulton and family.

- The Creamery in Tatamagouche will be closing early in 1992 after 60 years in operation.

- The first commercial harvesting of a new crop "ginseng" took place in Pugwash Junction.

- In the North Colchester-East Cumberland area 25 small farms are now on the Comprehensive Farm Development Program.

Introducing...

Cumberland County

Known as the "Blueberry Capital of Canada", Cumberland is the fourth largest county in the province according to gross farm sales. While the largest sectors of agriculture here are dairy and blueberries, it is also noted for its maple syrup production.

County farmers are well served by a host of service and processing outlets for blueberries, carrots, onion rings, strawberries, and maple syrup products.

Roughly triangular in shape, Cumberland County has 280 km of picturesque coastline - the Northumberland Strait area to the north, the Minas Basin to the south and Chignecto Bay to the west.

The early Acadian settlers arrived in 1605 and found a land rich with natural resources. Using dykes as their fathers had done in France, they expanded the fertile land base along the banks of the world famous high tides flowing up the Minas Basin.

Although farming was an essential factor in the economic development of the county, fishing and forestry developed more rapidly.

By the end of the 1700's, New England immigrants made up 2/3 of the population. In the 1800's Amherst and Oxford began to develop as industrial and manufacturing centres. In 1867 a woolen mill was established at Oxford.

By 1871 large scale coal mining had begun in the Springhill area, but by 1955 mineral production had decreased by 86% and numerous mine disasters made the industry no longer profitable and highly dangerous. Today the area relies on light industry and a minimum security prison.

The advent of iron ships replaced the wooden ones, ending the era of shipbuilding in Parrsboro. Farming, along with pulpwood cutting and lumbering remained the stable industry of the area.

Eastern Canada's largest greenhouses located in Oxford ship flowers throughout the Atlantic region.

RESOURCES

Climate

Growing Season (5°C): April 22 - Nov. 1(193 days)
Frost Free Period (0°C):
Last Spring: May 30 - June 5
First Fall: Sept. 15 - Oct. 15
Duration: 90 - 110 days
Annual Precipitation: 1,100 - 1,200 mm
Growing Season Precipitation: 400 - 450 mm
Annual Degree Days Above 5°C: 1,600 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Cumberland	Province
No. of Farms	506	4,283
Under $2,500	131	1,113
$2,500 - $4,999	77	567
$5,000 - $9,999	73	578
$10,000 - $24,999	91	641
$25,000 - $49,999	37	316
$50,000 - $99,999	37	333
$100,000 - $249,999	44	466
$250,000 & Over	16	269

Farms Classified by Major Product
(Source: 1986 Census)

	Cumberland	Province
Dairy	70	698
Cattle	125	979
Hogs	9	132
Poultry	5	127
Grain	10	63
Other Crops	1	45
Fruit	84	367
Vegetables	5	90
Misc. Specialty	37	481
Mixed	29	188
Total Farms	375	3,170

Field Crops Hectares
(Source: 1986 Census)

	Cumberland	Province
Wheat	185	n/a
Oats	1,093	5,230
Barley	859	4,823
Mixed Grain	587	n/a
Hay	9,403	68,398
Potatoes	16	1,633
Corn:		
Ensilage	133	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 436,459 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 231,250 ha
Percentage of Agricultural Land to Total Land Area: 53%

1991 IN REVIEW

- Cumberland County's agriculture was very much a function of the weather in 1991. A late spring frost, followed by a dry summer and wet fall affected most crops.
- The dairy industry lost three farms in 1991. Payout is down and many are looking to purchase more M.S.Q. Production per cow continues to improve.
- The beef sector saw small increases in numbers. This was due to assistance from programs, but mostly due to producers who firmly believe that beef does represent an opportunity for the future.
- The Spring Bull sale at the Nappan Test Station was down $675. per head on the 85 bulls sold, when compared to 1990.
- Feeder cattle prices in the fall appeared to be up over the previous year; but finished cattle prices dropped to $1.30 per pound dressed.
- Sheep numbers have declined. One large operation of 350 was sold as the owners returned to England. There are only a handful of flocks left in the county.
- Hog marketings in 1991 compared favourably with the 10,000 animals shipped the previous year ... low prices are threatening the industry at present.
- Two egg producers upgraded their grading stations to meet the new federal standards for eggs.
- Fur producers continue to hope for a turn around in the market.
- Strawberry producers suffered through a late frost and dry growing season. The quality of irrigated crops was excellent and prices remained strong.
- Blueberry producers experienced a very good year. The rains of early August produced the second largest crop in history (27,940,000 pounds) and prices were good.
- Blueberry producers continue to do land development work (levelling, stump and rock picking), so as to allow for mechanical harvesting.
- Paul Spacek of Williamsdale received approval to market his "Cumberland Blue", blueberry wine.
- The vegetable sector was affected by the drought. The processing carrot crop fared poorly. The cull rate was up to 83% from a normal 50%.
- Maple production was at 11,600 gallons, down from the 14,135 gallons in 1990.
- First crop of forage was 70% of normal. Most who took an early second cut, got a good third crop when the rains came.
- Early seeded grains turned off average yields, but most all late seeded grains were a disaster. Straw yields were down, and some soybeans were not harvested.
- All farm organizations continue to be active.
- Dairy producers are concerned about the GATT; however, by and large the sector is optimistic with many gearing up for expansion and reducing costs, so as to be better able to compete.

Introducing...

Halifax County

Halifax County in south central Nova Scotia is the largest county in the province with a wealth of industry including farming, manufacturing, lumbering, and fishing.

The recorded history of Halifax County began in June 1749 with the founding of the City of Halifax although trading and fishing posts had been established in the area earlier. The city was a prime location for an English military and naval base because of its central location on a peninsula and its deep ice-free harbour.

Over 2,500 people converged on the wilderness area around Halifax in 1749 to take advantage of some special inducements to attract more settlers. They were offered free transportation to the area, public financial support for a year, free arms, ammunition, and implements for clearing the land, building houses, farming and fishing. While an epidemic the first winter took a big toll on the community, the following summer the arrival of new settlers and new construction activity induced amazing progress.

Today just over one percent of the land area in Halifax County has been cleared for farming. Most of it is in the Musquodoboit Valley and Gays River area.

Both dairying and mixed farming are carried on as well as specialized enterprises, such as sod and vegetable production and considerable blueberry acreage.

The Halifax-Dartmouth metropolitan area is the most populated part of the Province and forms the largest local market for agricultural production.

Halifax Harbour, one of the world's finest, is capable of berthing ships of all sizes. Almost all Nova Scotia's exports and some from the rest of Canada are shipped through this port city.

Paved highways and a network of good secondary roads connect Halifax County with the rest of the Province. There is also a large modern airport about 40 km from Halifax at Kelly Lake.

RESOURCES

Climate

Growing Season (5°C): April 23 - Nov. 5 (196 days)

Frost Free Period (0°C):

Last Spring: May 15 - June 14
First Fall: Sept. 15 - Oct. 15
Duration: 90 - 130 days

Annual Precipitation: 1,400 - 1,450 mm Growing
Season Precipitation: 475 - 500 mm
Annual Degree Days Above 5°C: 1,400 - 1,650

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Halifax	Province
No. of Farms	155	4,283
Under $2,500	29	1,113
$2,500 - $4,999	18	567
$5,000 - $9,999	22	578
$10,000 - $24,999	31	641
$25,000 - $49,999	12	316
$50,000 - $99,999	15	333
$100,000 - $249,999	19	466
$250,000 & Over	9	269

Farms Classified by Major Product
(Source: 1986 Census)

	Halifax	Province
Dairy	32	698
Cattle	37	979
Hogs	2	132
Poultry	3	127
Other Crops	1	45
Fruit	10	367
Vegetables	6	90
Misc. Specialty	26	481
Mixed	9	188
Total Farms	126	3,170

Field Crop Hectares
(Source: 1986 Census)

	Halifax	Province
Oats	154	5,230
Barley	84	4,823
Hay	2,768	68,398
Corn:		
Ensilage	107	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 577,251 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 84,039 ha
Percentage of Agricultural Land to Total Land Area: 15%

1991 IN REVIEW

- Dairy is by far the major commodity in the area and is in a period of development and change.
- Producers are concerned with the GATT talks, returns to investment and free trade.
- Some producers are remodelling and updating milking parlours to handle more cows in an efficient manner.
- Improved genetics and forage quality have producers shipping the same quantity of milk from 15% fewer cows.
- The fur industry, mink, fox and chinchilla remains cautious.
- There were no major changes in the sheep industry in 1991.
- Hog producers suffered in 1991 due to very low market prices.
- The beef industry remained optimistic throughout the year. Calves weaned off better than average with prices close to 1990.
- Cows were culled heavily due to the shortage of pastures in 1991.
- There was very little activity in the poultry sector other than dealing with GATT concerns, and returns on investment.
- Blueberry producers had a good crop. Many are levelling fields to allow for mechanical harvesting.
- Irrigation paid off for those strawberry producers who had it. U-Pick demand was good but yields in general were down.
- Tomatoes and cucumber production remained constant, cranberry acreage was up; no change indicated in vegetable acreage. The weather affected all crops.
- It was a poor year for sod production. The drought and state of the economy left many acres unharvested.
- There was a renewed interest in corn in 1991. Acreage was up considerably. One drawback is the heavy clay soils at harvest time.
- First crop forage was very light due to the dry spell. Second and third crops were good and quality was excellent.
- The Halifax Exhibition had another good show.
- The Halifax-East Hants Federation of Agriculture held a tractor driving and safety workshop with 21 participants, the Central Nova Ploughing Match, and held regular monthly meetings.
- The Stewiacke District Federation held monthly meetings from September to May.
- Extension education meetings were held for beef and blueberry producers.
- Considerable time was spent on agricultural awareness in schools. Consumers must be made aware of the happenings in agriculture.
- Producers are aware of the world situation and are moving to greater efficiencies so as to be more competitive in future.
- This Agricultural Representative notes that reports from 50, 100 and 150 years ago carried the same message of hard times, and were still farming.

Introducing...

Hants County

Hants County is located on the western shore of Nova Scotia at the head of the Bay of Fundy. Bordering on the shores of the Avon and St. Croix rivers, it's a region of fertile land, and abundant timber.

The county can be divided into two distinct sections - the upland and the lowland plains. The ridges, valleys and irregular knolls of the lowland plain merge into the Annapolis-Cornwallis Valley on the west and extend up the Shubenacadie River Valley to the east. A well-defined escarpment rises to the south to meet the undulating, rolling hills of the upland plain.

The principal industries in Hants County are farming, lumbering and gypsum quarrying.

The county's first agricultural development began with the settlement of the Acadians in the 18th century. The early settlers erected dykes on the tidal marshes and grew wheat, barley, rye, oats, hemp, peas, cabbage and flax on the fertile soil.

After the expulsion of the Acadians 1755, the New England Planters moved in to take advantage of the opportunity for free land. Immigrants from Europe also moved in about that time.

The accessibility by land and water to Boston and other points on the Atlantic seaboard encouraged the production and export of wheat. Some areas like Falmouth developed with fruit crops.

During the War of 1812 military contracts for beef, pork and hay made grazing profitable and farmers began to neglect the tillage of the land and care of the soil. This state of affairs continued until 1818 when people in the area developed a renewed interest in agriculture. Seed and livestock were imported and agricultural societies formed.

Today mixed farming, dairying and orcharding are the principal forms of agriculture in Hants County. The area around Shubenacadie has a concentration of large dairy farms supplying milk to the Halifax market.

RESOURCES

Climate

Growing Season (5°C): April 20 - Nov. 1 (195 days)

Frost Free Period (0°C):

Last Spring: May 20 - May 30
First Fall: Sept. 20 - Sept. 30
Duration: 115 - 130 days

Annual Precipitation: 1,200 - 1,400 mm
Growing Season Precipitation: 425 - 475 mm
Annual Degree Days Above 5°C: 1,700 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Hants	Province
No. of Farms	398	4,283
Under $2,500	91	1,113
$2,500 - $4,999	42	567
$5,000 - $9,999	63	578
$10,000 - $24,999	62	641
$25,000 - $49,999	26	316
$50,000 - $99,999	42	333
$100,000 - $249,999	46	466
$250,000 & Over	26	269

Farms Classified by Major Product
(Source: 1986 Census)

	Hants	Province
Dairy	101	698
Cattle	113	979
Hogs	9	132
Poultry	4	127
Grain	3	63
Other Crops	0	45
Fruit	19	367
Vegetables	4	90
Misc. Specialty	41	481
Mixed	13	188
Total Farms	307	3,170

Field Crops Hectares
(Source: 1986 Census)

	Hants	Province
Wheat	140	n/a
Oats	422	5,230
Barley	339	4,823
Mixed Grain	123	n/a
Hay	9,044	68,398
Potatoes	13	1,633
Corn:		
Grain	194	1,976
Ensilage	311	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 318,142 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 187,209 ha
Percentage of Agricultural Land to Total Land Area: 59%

1991 IN REVIEW

- Dairy continues to be the backbone of agriculture in this area. Only one farm left the business, two changed owners, and more quota was purchased.
- Producers are shipping their quotas from fewer cows. Quality home grown feeds and better genetics and management contribute to higher production per cow.
- The Hants Cattlemen's Association was formed to give producers a new voice in their affairs on a local basis.
- Beef producers are weaning heavier calves. Some up to 1,000 lbs. at 11 months.
- Late planted grain was a total failure in 1991.
- One farmer constructed an on-farm grain mixing facility for public use. It is experiencing considerable use at present.
- Ten major building projects were done on farms; mostly new livestock housing facilities or major additions.
- The late fall allowed for considerable forage to be round baled and wrapped for haylage.
- Those farmers who purchased hay from P.E.I. experienced poor quality and moulding.
- Unless you had irrigation, the strawberry crop was down. Frost and dry weather caused many problems.
- Frosts also wrecked havoc with many orchards depending on locations.
- The grape crop was good, experiencing excellent weather for this crop. High sugar content should give some very good wines.
- Farmers made considerable use of government programs, especially AFDA and ALFI. Farmers are trying to produce the best forages they can, and store it in the best possible shape.
- Kitchen meetings were hosted by Federation Directors to update farmers on programs, policies, etc.
- NISA and GRIP programs are being accepted slowly.
- Forage Day was highlighted by 87 samples for competition.

Introducing...

Kings County

A gentle explosion of white apple blossoms lauds the birth of a new growing season each spring in Kings County. It's an event that has come to signify the agricultural wealth of Nova Scotia's fertile Annapolis Valley.

Early French explorers wrote excitedly of the area's rich soil and favourable climate. Extensive agricultural development arrived with the Acadian settlers in 1675. They dyked the tidal marshes to reclaim hundreds of acres from the sea and planted wheat, rye, and hay and established world-renowned orchards with imported fruit trees from France.

After Britain took control of the region in 1713, many of the Acadians left. The New England Planters moved in and took over the vacated farms, followed by the Loyalists after the American Revolution. The newcomers experimented with different varieties of fruit, and diversified crop production to include corn, flax and roots.

The completion of the Windsor and Annapolis Railway in 1869 opened the door to vast new markets for apple production.

Annapolis Valley producers successfully penetrated the British apple market in the 1890's. However, export markets nearly collapsed during World War II, and it took until 1973 to revive apple sales to Britain.

Kings County today produces about 50% of Nova Scotia's agricultural products. Although the area is probably best known for its apples, the pleasant climate, rich soil and sheltered location between the North and South mountains is ideal for a wide range of horticultural crops such as tree and berry fruits, vegetables, tobacco, grain corn, winter cereals, legumes and field crops for livestock feed.

Kings County's agricultural industry has strengthened its ties with the processing sector in recent years. Most of the county's manufacturing involves meat, poultry, fruit and vegetable processing.

RESOURCES

Climate

Growing Season (5°C): Apr. 20 - Nov. 3 (197 days)
Frost Free Period (0°C):
Last Spring: May 15 - May 30
First Fall: Sept. 30
Duration: 110-130 days
Annual Precipitation: 1,200 mm - 1,400 mm
Growing Season Precipitation: 425 - 475 mm
Annual Degree Days Above 5°C: 1,600 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Kings	Province
No. of Farms	711	4,283
Under $2,500	113	1,113
$2,500 - $4,999	67	567
$5,000 - $9,999	63	578
$10,000 - $24,999	102	641
$25,000 - $49,999	66	316
$50,000 - $99,999	79	333
$100,000 - $249,999	100	466
$250,000 & Over	121	269

Farms Classified by Major Product
(Source: 1986 Census)

	Kings	Province
Dairy	69	698
Cattle	100	979
Hogs	56	132
Poultry	74	127
Grain	14	63
Other Crops	28	45
Fruit	124	367
Vegetables	41	90
Misc. Specialty	38	481
Mixed	54	188
Total Farms	598	3,170

Field Crops Hectares
(Source: 1986 Census)

	Kings	Province
Wheat	1,685	n/a
Oats	1,214	5,230
Barley	1,290	4,823
Mixed Grain	119	n/a
Hay	8,126	68,398
Potatoes	1,467	1,633
Corn:		
Grain	1,294	1,976
Ensilage	1,002	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 215,362 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 100,774 ha
Percentage of Agricultural Land to Total Land Area:47%

1991 IN REVIEW

- The year 1991 was an unusual and difficult growing season for most horticultural and field crops. A killing freeze in early May turned fruit blossoms brown, a drought from May 15 until July 15, and several localized hail storms in early August caused much damage to the already small apple and pear crop. Vegetable crops suffered due to the hot, dry weather, and although most sizable growers use irrigation, there were gluts in the market for many cole crop growers until late in the season when conditions improved.

- Many farmers are "down" due to the low prices being received across the board - pork and beef prices are very low. One bright spot is the cranberry industry which continues to do very well.

- The dairy industry remained fairly stable in 1991. MSQ cuts and reduced payouts kept the producers on hold.

- A considerable portion of the N.S. beef industry is located in Kings. More cattle are being finished, however, prices were down in 1991.

- Some dairy producers are adding beef feedlots to make use of home grown feeds, especially corn.

- Kings marketed 128,000 of the 220,000 hogs shipped in 1991; down 20,000 from 1989 figures. Low returns have forced some producers out, while others cut back.

- Fifteen of N.S.'s 38 egg producers are in Kings. Returns were somewhat lower in 1991.

- Fifty-seven of N.S.'s 70 broiler producers in Kings produced 85% of the provincial production. This industry is presently on hold.

- Fourteen of N.S.'s 18 turkey producers in Kings produced 80% of the product. Production has levelled off following a cutback in quota during 1991.

- The 1991 apple crop was estimated at 1.68 million bushels, down from the 3.3 million crop of 1990. Two damaging freezes at bloom time, the long drought, and hail damage caused this loss.

- COBI Foods sold their orchard operation to Stirling's Fruit Farms Ltd.; their juice operation to Great Valley Juices, Quebec.

- The strawberry crop was down to 3 million quarts due to frost and drought; prices were stronger.

- Raspberry production was down on average; cranberries experienced another good year; grape production was up to 183 tonnes in 1991.

- 75% of N.S.'s honey comes from Kings County. The bees are in great demand for pollination in blueberry fields throughout N.S.

- Vegetables experienced a difficult year. Broccoli, lettuce, cauliflower and spinach had a bad year. Potato contracts were down, a small crop of early potatoes, and low sweet corn prices affected producers. Irrigation costs were very high in 1991.

- Due to the wet fall, only about 25% of intended winter wheat was seeded. This may result in an increase in soybeans and grain corn next spring.

- 1991 was a very good tobacco growing year. Yields and prices were good.

- Doug and Heather Hennigar, Greenwich, were one of three Canadian farm couples to be selected "Outstanding Young Farmer Award" in 1991.

Introducing ...

Annapolis County

Some of the most beautiful and prosperous land in the province can be found in Annapolis County. Nestled between the North and South mountains it forms the western portion of the Annapolis Valley. The fortunes of this fertile land have been inextricably wound with those of agriculture.

The Acadians settled around Port Royal (now known as Annapolis Royal - Canada's oldest settlement) in 1605. They cleared the land and turned vast salt water marshes into fertile farmland by draining and dyking. However, work went slowly under constant harassment by British soldiers.

When the Treaty of Utrecht handed the area over to Britain in 1713, many Acadians were forced to leave. The Planters from Massachussetts moved in, taking over some of the vacated land.

Between 1775 and 1785 the United Empire Loyalists moved in to significantly change the face of agriculture. Clearing the thick forest was hard work, but assisted by government rations, tools and land grants they were able to establish successful farming settlements. Under the influence of the Loyalists, agriculture diversified and expanded with improved techniques that increased dairy, beef, grain and fruit production.

By 1871 the county's population had swelled to nearly 18,000, opening up a substantial local market. Some light industry developed including a tannery, grist mills, a cheese factory and a cider and vinegar producer.

Today Annapolis County, with its fertile soil and pleasant climate produces a variety of agricultural products destined for markets across Canada and around the world.

RESOURCES

Climate

Growing Season (5°C): April 20 - Nov. 5 (199 days)

Frost Free Period (0°C):

Last Spring: May 15 - May 30
First Fall: Sept. 15 - Sept. 30
Duration: 110 - 130 days

Annual Precipitation: 1,200 - 1,400 mm
Growing Season Precipitation: 425 - 480 mm
Annual Degree Days Above 5°C: 1,600 - 1,750

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Annapolis	Province
No. of Farms	306	4,283
Under $2,500	83	1,113
$2,500 - $4,999	49	567
$5,000 - $9,999	45	578
$10,000 - $24,999	47	641
$25,000 - $49,999	19	316
$50,000 - $99,999	20	333
$100,000 - $249,999	30	466
$250,000 & Over	13	269

Farms Classified by Major Product
(Source: 1986 Census)

	Annapolis	Province
Dairy	46	698
Cattle	96	979
Hogs	9	132
Poultry	2	127
Grain	3	63
Other Crops	6	45
Fruit	24	367
Vegetables	9	90
Misc. Specialty	17	481
Mixed	11	188
Total Farms	223	3,170

Field Crops Hectares
(Source: 1986 Census)

	Annapolis	Province
Wheat	88	n/a
Oats	318	5,230
Barley	559	4,823
Mixed Grain	30	n/a
Hay	5,816	68,398
Potatoes	81	1,633
Corn:		
Grain	121	1,976
Ensilage	191	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 335,166 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 46,755 ha
Percentage of Agricultural Land to Total Land Area: 14%

1991 IN REVIEW

- The weather was not very friendly to Annapolis County farmers in 1991. Early frosts, lack of rain, then too much rain, dealt producers a summer they didn't need.

- During 1991, Annapolis lost two dairy farms with a total of 180 cows from the industry. Significant quota purchases, both fluid and MSQ, have been made by other producers.

- There has been considerable modernization on dairy farms, record levels of production on several farms and much improved forage quality.

- Most dairymen are on hold until the GATT talks are settled. In the meantime, they realize efficiency and volume are going to become more important.

- Beef producers had a good calf crop with evidence of quality. Soft markets and the dry summer will reduce the breeding herd. Overall quality should improve.

- The AFDA-Comprehensive Farm Development programs has greatly assisted in improving and expanding facilities for beef; improved the quality of breeding cows, and most important is improving crop land production.

- Beef producers have realized that you can't background or finish cattle without a top quality feed program.

- They have found that by increasing cow numbers and selling heavy calves to feedlots in the fall works well on most beef farms.

- Improved forages through rotations, species, handling and storage will mean increased production of milk and beef and lowered feed costs.

- Farmers are looking at high moisture corn as an energy source. Cereals are necessary to supply straw for bedding.

- Farmers are very interested in more custom operators to handle forage crops.

- Hog producers continue to create new efficiencies and improve management, to try and offset the continued low prices.

- Poultry, fur and sheep production remained static in 1991. These are not major commodities in Annapolis.

- Two killing frosts in the spring dramatically reduced yields of apples, pears, cherries, plums and strawberries. Fall brought a mini hurricane to add to the woes.

- Several orchardists are replanting using the high density techniques that were successful in British Columbia.

- Too little, then too much rain severely affected vegetable production.

- The greenhouse industry was a bright spot in 1991. The ornamental industry is growing fast, as is the bedding plant sector. Sauerkraut, and summer savory are finding specialty markets.

- The Western Annapolis Valley Cattlemen's Association continues to be active, innovative and aggressive in their efforts to see the beef industry prosper.

- An 80 hour computer course, with instructors from the Acadia School of Small Business, had 20 participants.

- The "Bellisle Marsh" has been sold to Ducks Unlimited and will be developed into a feeding ground and habitat for migratory and non-migratory birds.

Introducing...

Lunenburg and Queens Counties

Lunenburg and Queens counties were settled by a mixture of Germans, French, and British people. Fishing villages began to spring up along the coast in the mid 1700's. Most settlement was along the shore with some agricultural communities inland.

Those early farmers faced some hard times in their new land. Clearing the virgin forest was tedious, back-breaking work. They lived in constant fear of Indian raids and were harassed by pirates and privateers along the coast.

After the American Revolution of 1775 there was a large influx of American settlers. These highly educated and wealthy people were poorly prepared for the rigors of settlement in a new and often infertile land.

Agriculture became more progressive with the prosperity of the age of wood and sail in the 1800's. Lucrative international trade patterns developed and settlement expanded further inland to the more fertile farmland.

The main occupations of the area's largely rural population today are fishing, farming and lumbering. However, recent years have seen a big change in the profile of agriculture. Small, farms have given way to more centralized, diversified operations. More people have been drawn away from agriculture, attracted by the shorter hours and better pay of work in the urban areas.

Today more than 2,800 hectares of land is used for agriculture in Lunenburg-Queens. Hay is one of the most significant field crops followed by barley, oats, potatoes and corn. The region also boasts a number of highly productive dairy, poultry and beef farms.

Lunenburg County is considered the "Christmas Tree Capital of Canada" with a large export market in the USA.

RESOURCES

Climate

Growing Season (5°C): April 20 - Nov. 5 (199 days)

Frost Free Period (0°C):

Last Spring: May 15 - May 30
First Fall: Sept. 15 - Oct. 15
Duration: 110 - 150 days

Annual Precipitation: 1,400 - 1,450 mm

Growing Season Precipitation: 475 - 500 mm

Annual Degree Days Above 5°C: 1,400 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Lunenburg	Queens	Province
No. of Farms	305	35	4,283
Under $2,500	126	15	1,113
$2,500 - $4,999	41	7	567
$5,000 - $9,999	43	2	578
$10,000 - $24,999	39	8	641
$25,000 - $49,999	15	1	316
$50,000 - $99,999	14	1	333
$100,000 - $249,999	20	0	466
$250,000 & Over	7	1	269

Farms Classified by Major Product
(Source: 1986 Census)

	Lunenburg	Queens	Province
Dairy	33	1	698
Cattle	77	12	979
Hogs	9	1	132
Poultry	13	1	127
Grain	2	0	63
Other Crops	0	0	45
Fruit	8	1	367
Vegetables*	3	0	90
Misc. Specialty	28	2	481
Mixed	6	2	188
Total Farms	179	20	3,170

Field Crops Acreage
(Source: 1986 Census)

	Lunenburg	Queens	Province
Oats	124	14	5,230
Barley	37	0	4,823
Hay	3,114	241	68,398
Potatoes	5	0	1,633
Corn:			
Ensilage	43	0	2,467

1 hectare = 2.47 acres

Land & Soil

	Lunenburg	Queens	Total
Total Land Area (ha) [1]	315,027	269,941	584,968
Classes 2,3,4 Soil (ha) [2]*	36,156	4,742	40,898
Percentage of [2] to [1]	11.5%	2%	7%

1991 - IN REVIEW

- 1991 was the driest year in this area for some time. This led to severe shortages of summer pasture and forages for winter feed. Many fields had to be reseeded in late summer when the rains came.

- The first crop of hay was very light and the second crop ended up as pasture. Some farmers seeded late crops of grains which was chopped and ensiled.

- The demand for pulp wood slowed down and this affected a supplementary source of income on many farms. The demand for Christmas trees was down from U.S. markets. In late season good trees were in demand but prices had dropped.

- Dairy and poultry farmers in Lunenburg were concerned over the G.A.T.T. uncertainties. Many of these farms are small and cannot expand their land base.

- Lunenburg & Queens maintained their 21 fluid milk and 12 cream shippers in 1991. Very little quota moved into the area.

- The poultry industry remained strong on the South Shore. One egg producer left but the quota stayed in the area.

- Some of the small beef herds were dispersed in early winter due to feed shortages. The Federation continues to operate spring and fall feeder sales.

- Only four hog producers remain; as more left due to the very low prices.

- There is renewed interest in the sheep sector. The Island sheep industry is expanding.

- The greenhouse and horticultural sectors continue to expand. Bedding plants and landscape horticulture is also an expanding sector. There is considerable interest in farm or roadside markets.

- The fruit and berry crop yields were down. Blueberries went for processing rather than fresh. The apple crop was fair with good prices.

- The fur industry has not expanded since 1990.

- There continues to be considerable activity in the AFDA - Comprehensive Farm Development Program.

- Arthur Pick, Agricultural Representative, returned to the University of Alberta to complete his Masters degree. Bev Connell, Assistant Agricultural Representative in Kings looked after this area.

Introducing...

Digby County

Fishing boats roll in the swell just off the coast. Huge stretches of timberland are broken by fields of grass and hay. A network of lively streams and lakes winds through the stoney surface of the land. This is Digby County, tucked between Yarmouth County in the south, Annapolis County to the east and the Bay of Fundy to the west.

The county was settled mainly by New England Loyalists and French Acadians who returned to Nova Scotia after the Expulsion of 1755. Since the beginning, people's lives in Digby have been tied to the sea, the land and the woods.

Most of the people in Digby County live off fishing, farming and lumbering within a coastal strip five to ten miles wide along the shores of St. Mary's Bay and Digby Neck.

Known as the "Fur Capital of Canada", Digby ranchers produce some of the best quality fox and mink fur pelts in the world.

About 75% of Nova Scotia's mink production takes place in Digby County. Local fish plants have provided a source of feed for the mink, and a suitable climate help make it one of the major mink producing areas in Canada.

The chief crops grown in the County are hay and grass. Some acreage is planted in grain, fruit and vegetable crops. Digby has also traditionally produced top quality pork.

RESOURCES

Climate

Growing Season (5°C): April 20 - Nov. 11 (205 days)

Frost Free Period (0°C):

Last Spring: May 15 - May 30
First Fall: Sept. 15 - Oct. 15
Duration: 110 - 150 days

Annual Precipitation: 1,200 - 1,400 mm
Growing Season Precipitation: 450 - 500 mm
Annual Degree Days Above 5°C: 1,600 - 1,700

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Digby	Province
No. of Farms	167	4,283
Under $2,500	42	1,113
$2,500 - $4,999	23	567
$5,000 - $9,999	18	578
$10,000 - $24,999	31	641
$25,000 - $49,999	13	316
$50,000 - $99,999	4	333
$100,000 - $249,999	15	466
$250,000 & Over	21	269

Farms Classified by Major Product
(Source: 1986 Census)

	Digby	Province
Dairy	1	698
Cattle	23	979
Hogs	9	132
Poultry	6	127
Grain	4	63
Other Crops	2	45
Fruit	2	367
Misc. Specialty	75	481
Mixed	3	188
Total Farms	125	3,170

Field Crop Hectares
(Source: 1986 Census)

	Digby	Province
Barley	24	4,823
Hay	693	68,398
Potatoes	14	1,633

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 271,553 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 64,362 ha
Percentage of Agricultural Land to Total Land Area: 24%

1991 IN REVIEW

- Agriculture in Digby County is comprised of mink, fox, hog, beef and horticulture farms.

- For the fifth consecutive year prices for mink pelts continue to decline.

- Prices received are well below the cost of production. Producers, large and small, are reducing their breeding stock or pelting out completely. Most of those remaining are in financial difficulty.

- Fox ranchers and numbers also continue to drop. Prices received are also well below the cost of production.

- The Digby County hog industry has now been reduced to six large producers. Low prices received for market hogs over an extended period has severely damaged this once profitable commodity. Producers are contemplating further reductions in herd size unless prices improve immediately.

- Digby beef producers were also affected by last summers dry weather. The poor hay crop resulted in reduced cattle numbers. Many of the producers are in the 60-65 age group.

- Part-time beef producers are having trouble finding off-farm employment at present which in the past has supplemented their income.

- The strawberry crop was only fair due to early spring frosts. Also, the highbush blueberry crop was damaged by early fall wind and rains during peek ripening. There are some new plantings.

- Several successful short courses and events were held in 1991.

  - G.S.T. Seminar - 80 attended
  - Farm Women's Day - 45 attended
  - Pruning Fruit Trees Demonstration - 45 attended
  - Composting & Soils Seminar - 100 attended
  - Two Beef Seminars - 50 & 18 attended
  - Landscaping Course - 25 attended
  - Weymouth, Champlain, Admiral, Digby and Digby Farmers Market Christmas Bazaar - 1,650 attended
  - Beef producers Tour to Feeder Sale - 18 attended

Introducing...

Yarmouth County and Shelburne County

Yarmouth and Shelburne Counties are located at the south-western tip of the province which has some of Nova Scotia's most rugged coastline.

However further inland, pockets of surprisingly productive farmland flourish in spite of the topography.

For more than 200 years farmers have worked the land here - undaunted by the less than ideal soil. Using hard work and the right management techniques, they've pushed aside the stones to grow a wide range of crops.

The area was originally settled by the French early in the 17th Century, scattered by the Expulsion of the Acadians in 1755. Many, however, returned to live in fishing villages along the coast. English Loyalists moved into Yarmouth/Shelburne after the Expulsion.

While most of the early villages sprung up along the shore to take advantage of the lucrative fishing and ship building opportunities, some people moved inland to take up lumbering and farming.

The agricultural industry has gone through a period of decline, but in recent years there has been a stabilization, and in some cases a growth in agricultural activity.

Full time operators have grown to a size where they can be fully competitive with their counterparts elsewhere in the province. The smaller farmers work part-time, adjusting to produce commodities for which there is a ready market. Much of what is produced in the region is consumed locally.

RESOURCES

Climate

Growing Season (5°C): April 20 - Nov. 10 (204 days)

Frost Free Period (0°C):

Last Spring: April 30 - May 30

First Fall: Sept. 15 - Oct. 30

Duration: 110 - 170 days

Annual Precipitation: 1,200 - 1,400 mm

Growing Season Precipitation: 450 - 500 mm

Annual Degree Days Above 5°C: 1,400 - 1,700

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Yar-mouth	Shel-burne	Province
No. of Farms	134	22	4,283
Under $2,500	54	4	1,113
$2,500 - $4,999	20	4	567
$5,000 - $9,999	14	8	578
$10,000 - $24,999	15	4	641
$25,000 - $49,999	9	1	316
$50,000 - $99,999	11	0	333
$100,000 - $249,999	8	1	466
$250,000 & Over	3	0	269

Farms Classified by Major Product
(Source: 1986 Census)

	Yar-mouth	Shel-burne	Province
Dairy	17	1	698
Cattle	15	0	979
Fruit	1	4	367
Vegetables	3	0	90
Misc. Specialty	38	12	481
Mixed	6	1	188
Total Farms	80	18	3,170

Field Crops Hectares
(Source: 1986 Census)

	Yar-mouth	Shel-burne	Province
Hay	723	n/a	68,398
Potatoes	1	0	1,633

1 hectare = 2.47 acres

Land & Soil

	Yarmouth	Shelburne	Total
Total Land Area (ha) [1]	275,639	185,054	460,693
Classes 2,3,4 Soil (ha) [2]*	50,427	1,508	51,935
Percentage of [2] to [1]	18%	1%	11%

1991 IN REVIEW

- The Yarmouth-Shelburne area had a difficult year in 1991. A destructive May frost, a depressed fur market and the future of supply management, created a sense of pessimism.

- Not all was doom and gloom. The number of milk shippers stabilized with an increase in the fluid quota base. Beef, fox and blueberry producers are again on the up-swing.

- Dairy production accounts for 50% of the agricultural sales in this area, with all eleven producers shipping to Cook's.

- Some smaller dairy producers are interested in a custom service putting up round bale haylage.

- Dairymen are interested in increasing their fluid quotas, embryo transfer, and more forage storages.

- The beef sector involves 18 producers with 250 cows. The South West Cattlemen's Association was formed to encourage development of this sector through information up-date meetings, tours, etc.

- The Yarmouth Exhibition had a strong beef show, successful steer sale, and informative public displays.

- 1991 was an excellent year for off-shore sheep flocks. Approximately 1,500 ewes are grazed on islands situated from one to fifteen miles off-shore. The mild weather during lambing resulted in an excellent crop. The sheep pasture in summer and eat kelp during winter.

- Coyotes have now reached some islands. Two were abandoned in 1991, following the loss of 85 sheep.

- Marketing is still a problem; 250 lambs went to the local freezer trade, 300 to feedlots in Quebec, and the balance through sales in Truro.

- Producers continue to erect handling facilities, fences and corrals on the islands.

- Fox production in 1991 involved 65 ranchers with 3,000 breeding females. Though over 7,800 pelts sold, they did not meet production costs. There is optimism for the 1992 crop.

- Eight mink ranchers produced 18,000 pelts, again not realizing the cost of production. These ranchers do not have the optimism held by fox producers.

- They are closely watching the proposal to build a central feed station in Digby county.

- A heavy frost in May cut the blueberry crop in half. Only 84,600 lbs. were shipped to COBI Foods in 1991.

- Land levelling is being done on blueberry land with impressive results. This along with improved cultural practices would allow for an increase in production to 300,000 lbs.

- The Agricultural Office moved from the Provincial Building to 55 Starr's Road; a distinct improvement over the previous cramped quarters.

- Twelve extension programs featuring meetings, tours and demonstrations attracted 714 people.

- There is continued interest in vegetables, fruit, and greenhouse crops.

Nova Scotia

Department of Agriculture and Marketing

Extension Services Branch

Annual Report

1991 Home Economics Section

AgriFocus

FOREWORD

The Annual Report of the Home Economists Section consists of six (VI) sections.

Sections I-VI contain statistical tables which include: (I) Performance Indicators, (II) Agricultural Awareness and Food and Education, (III) Women's Institutes, (IV) 4-H, (V) Farm and Agricultural Related Activities, (VI) Other Activities, and Closing.

This report is designed to provide the reader with a view of the Home Economics Section program and at the same time, develop an appreciation of the nature and scope of the Sections activities.

The staff who coordinate the Home Economics Extension Program are:

Colleen MacNeil*	Regional Home Economist	Antigonish Office Antigonish, Pictou Guysborough
Gail Keddy	Regional Home Economist	Truro Office Cumberland, Colchester, Halifax, East Hants
Cheryl Butts-MacMillan	Regional Home Economist	Mabou Office Victoria, Inverness
Jane Lewis	Regional Home Economist	Sydney Office Cape Breton, Richmond
Valorie Oickle	Regional Home Economist	Bridgewater Office, Lunenburg, Queens, Shelburne, Yarmouth
Marjorie Knowles	Regional Home Economist	Kentville Office, Hants, Kings, Annapolis, Digby
Susan Horne	Supervisor, Home Economics	Truro Office

OTHER: Susan Waringer, Challenge Employment Project Worker shared between 4-H and Home Economics Sections and Sonja Doyle - Civil Service Disabled Training Project Worker.

*At the time of writing this report, Colleen MacNeil is on maternity leave. Shari MacGillivray-Bray is her replacement.

The **Home Economics Section** is responsible for (Key Result areas):

1) Agricultural Awareness:
   a) providing local coordination of agricultural awareness programs,

   b) conducting agricultural awareness programs and activities.

2) Food Education:
   a) coordinating a food education program using Nova Scotia foods,

   b) conducting food education programs using Nova Scotia foods,

   c) providing technical information and management advice of food buying, handling, preparation and storage.

3) Rural Organizations:
   a) providing leadership to rural organizations,

   b) facilitating group, personal and skill development in rural organizations.

4) Resources:
   a) develop resource materials, training packages and courses.

These key result areas provide the working framework in the output expected from the Home Economics Section. The work of the Section is carried out by county, regional and on a provincial basis by the seven staff. Each Regional Home Economist develops a regional work plan appreciative to the needs of the local area. Over the last year and in the upcoming years, more emphasis has been and will be placed in the Agricultural Awareness area.

SECTION 1 PERFORMANCE INDICATORS

January 1 - December 31, 1991

INDICATOR	W.I.	4-H	FARM	PROFESSIONAL	OTHER	YEARLY TOTAL	PREVIOUS YEAR
# of calls on clients	52	122	24	75	89	362	433
# of office calls	102	335	67	100	239	843	778
# of meetings, short courses, programs, displays, etc. attended	122	406	175	202	158	1063	1537
Attendance at meetings, short courses & programs	3134	32763	10191	2441	5616	54144	44994
# of mass meetings, programs, displays, etc.	3	24	13	6	9	55	47
Attendance	550	58058	21735	3380	11835	95558	113859

2173 (4170) Information Requests

272 (1244) Radio & T.V. Broadcasts

7245 (8589) Letters Written

1566 (852) Newspaper Articles or Releases

25191 (27252) Publications & Circulars Distributed

NOTE: Brackets are for last year's figures.

ANALYSIS: The performance indicators are the same ones used throughout the whole Extension Branch so it provides a consistent basis of quantitative measure.

In doing the analysis each year, some changes are quite predictable whereas others are not. For example. Calls on clients are down, therefore, office calls are up. However, the actual number of meetings and courses are down significantly, but the attendance is up over 9,000 people. The attendance increase is with 4-H, farm and other categories over the previous year. 4-H represents more than 50% of the total attendance figures and 40% of the total meetings, etc.

The increase in the "farm" and "other" categories was anticipated as the Section implements an increased number of agricultural awareness programs in schools, exhibitions, and the general public.

The section provides a one to one service to answer consumer questions. These are usually on food safety, food preservation, food handling and preparation methods. Many of these can be handled quickly but some require research time, however, our clients are very responsive to this service available to them. The amount of time required to respond to their request varies on the complexity of the request or the availability of staff. Calls decreased by 50% this year which is significant, although in the previous year there had been a 150% increase. Many of these calls are reflective of the growing season. For example, when there is an over abundance of certain types of produce on the market at a low price, consumers want answers on how to handle and preserve large amounts.

Media is a very important vehicle the section uses to get its message out to the public. The changes in numbers are more a reflection of a new recording system of putting newspaper and radio together, and TV separately, although there is a reduction overall.

Publications and circulars that are distributed continue to decline each year. Commodity boards now produce high gloss, colorful materials that the sections budget and staff time for developing do not allow so it is expected this will continue.

In taking a closer look at who the clients were we served expressed in a percentage of the total served: W.I. - 5.8% (9.02); 4-H - 60.5% (52.6); Farm - 18.8% (19.8); Professional 4.5% (7.5); Other 10.4% (10.8).

SECTION II AGRICULTURAL AWARENESS/FOOD EDUCATION

DEMONSTRATIONS & PRESENTATIONS

	NUMBER OF	GROUP IF APPLICABLE
1) Food Buying, Budgeting	11	Employment retraining, low income, transition house, consumers, women's shelter, Michelin.
2) Food Preparation Basics	19	WINS, Home & School, church, senior citizens, students.
3) Food Preservation	9	Consumers, Garden Clubs.
4) N.S. Food Product Education	17	Home & school, consumers, W.I., students, tourists, fire auxiliary.
5) OTHERS: Diet/Cancer, Gifts From Kitchen, Food Safety	9	YMCA, church groups, CSE, hospital staff.
6) Agriculture Awareness in the school presentations	74	Students/teachers.

EXHIBITS, DISPLAYS, SHOWS

THEME	DURATION	SPONSOR
AgCiting Discoveries	2 days	Home Ec/Ext/Federation.
Food Fantasy Show	1 day	WINS Home Ec.
Red Meats	2 days	Home Ec.
Summer Fruits	3 days	Home Ec.
Ag Awareness	8 days	Home Ec./Federation
C.B. Maple Syrup	½ day	Home Ec./Producer
N. S. Apples	½ day	Home Ec.
CFJ Puppet Shows(43 performances)	14 days	Home Ec.
Nutrition Month	1 hr.	Health/Home Ec.
McDonald Mini Farm	6 days	Home Ec./McDonalds
Harvest Food Fest	2 days	N.S.D.A.M.
Festival of Trees	5 days	N.S.D.A.M./W.I./Regional Hospital

WORKSHOPS AND/OR SHORT COURSES

	NUMBER OF	GROUP IF APPLICABLE
Garnishing with N.S. Goodness	3	Church group, community school
Wok Cooking	7	W.I.N.S.
N.S. Vegetables with A Difference	2	Consumers
Cholesterol & Meat Products	4	Community School, W.I.N.S. Library
Economical Food Preparation	1	Cardell Place
Grocery Store Tours	7	Consumers, women's shelter, low income

SPECIAL PROJECTS (What, For Whom)

	AMOUNT OF TIME	PURPOSE
Harvest Food Fest	6 days	Coordination/Promotion
McDonaldland Mini Farm	5 days	Coordination/Ag. Awareness
Pictou Schools-Ag. Awareness Project	6 days	Coordination/Ag. Awareness
Municipal Councillors Farm Tour	1 day	Coordination/Ag. Awareness
Cooking Nova Scotia (T.V. Programs)	12.5 days	Coordination/Food Education
Nutrition Capers	12 days	Coordination/Food Education
Ag. Awareness School Survey	2 days	Needs assessment/Awareness
Agricultural Ambassador Project	7 days	Advisor, project leader
Agricultural Awareness Coordinator	12 days	Advisor, project leader
Agricultural Awareness Soils Project	3 days	Needs assessment, project leader
Agricultural Awareness Display Project	3 days	Project Leader/Awareness

RESEARCH & PROGRAM DEVELOPMENT

	AMOUNT OF TIME	PURPOSE
CFJ-Puppet Show-Teachers Resource Guide & Video	15 days	Ag. Awareness, project leader
Ag. Trivia Computer Game	3 days	Ag. Awareness, Harvest Food Fest
Recipe Testing & Preparation	3 days	Demonstrations, 4-H
Radio Scripts Research	41.5 days	Food Education/Ag. Awareness
Newspaper Column Research	27.5 days	Food Education/Ag. Awareness
Cable T.V. Recipe Testing	6 days	Food Education/Ag. Awareness
Teacher/School Board Committee	4 days	Ag. Awareness Kit/Awareness
Bean Booklet Testing	7 days	Education
Prime Apple Variety Testing	2 days	Research & Education
Grocery Store Package Development	½ day	Staff resource/education
AWF-School Days	3 days	Advisor/Ag. Awareness
Ag. Awareness Newsletter	8 days	Developer
Food Safety Training Package	10 days	Advisor, Project Leader/Education
Garden Guide	2 days	Researcher/Education

OTHER

	AMOUNT OF TIME	PURPOSE
N.S. Ag. Awareness Committee Meetings	5 Mtgs.	Home Ec. Rep/Chairperson
County or Federation of Agriculture-Ag.Awareness	12 Mtgs.	Coordination Ag. Awareness
Food Competition Judging	½ day	Judge/PR
World Food Day Conference	3 days	Planning Committee/Awareness
World Food Day Committee	8 Mtgs.	Secretary

Two key result areas that the Home Economics Section is responsible for is coordinating and conducting programs in Agricultural Awareness and Food Education.

The tables provide the specific details as to the kinds of programs that were done.

Highlights of a few of the programs under Agricultural Awareness include:

Agriculture In Inverness: This is a Grade 6 project being coordinated by Cheryl Butts-MacMillan with the Inverness Women's Institute. To date numerous lesson plans have been written for each of the eight commodities produced in Inverness County. The project will be finalized in the Spring of '92 and teachers resource binders will be provided to each school in Inverness County.

The Country Farm Jamboree: "The Farmer Feeds Us All" live puppet show visited schools on Cape Breton Island. To date over 10,000 school children have seen the show developed by Jane Lewis. A video tape of the show and a teacher's resource guide has been completed.

Valorie Oickle has worked closely with the Federation of Agriculture - Agricultural Awareness Committee in developing a special display at the exhibition. As well, the committee coordinated a farm tour program for municipal councillors.

In Colchester County, a committee that Gail Keddy was part of coordinated a special agricultural awareness program at the Provincial Exhibition. Colleen MacNeil worked with a committee in Pictou County and planned winter and spring classroom presentations on agriculture.

The Home Economics Section developed the Agricultural Awareness Newsletter which is a regular five page feature in the Extension News. The first edition was in September and goes out to 5,000 readers. The purpose of the Newsletter is to share the things that are happening in agricultural awareness and to encourage the farm community to be involved.

The Festival of Trees to promote the use of Christmas trees.

Highlights in Food Education include:

Food Fantasy Show was an evening of food demonstrations featuring Nova Scotia commodities as well as displays promoting local value added products. The show was coordinated by Marjorie Knowles in cooperation with Kings County Women's Institutes.

Gail Keddy conducted Grocery Store Tours and finalized a resource package on conducting tours. The purpose of the tours is to help consumers in food buying information as well as discuss the Nova Scotia agricultural produced products. As the participants tour the store, the Home Economist discusses and fields questions.

Fat and cholesterol programs are very necessary to try to clean up the public misconceptions. The grocery store tours also provide a way to educate people about this issue.

Garnishing workshops teach people how to make their food more appealing by using Nova Scotia foods for garnishes.

Marjorie Knowles has worked on the production of a dried bean recipe book on behalf of producers in the valley.

The Harvest Fest was held in Sydney. Along with the Nova Scotia food featured, the show had the new Agricultural Awareness display along with an Agriculture Trivia Computer Game.

N. S. AGRICULTURAL AWARENESS COMMITTEE

The Committee is chaired by Susan Horne and since a great deal of time is devoted to Agricutlural Awareness, it seems appropriate to report on its activities here.

This umbrella committee is made up of representatives from the N. S. Federation of Agriculture, N. S. Institute of Agrologists, Department of Agriculture and Marketing, Women's Institutes, Nova Scotia Agricultural College, Agriculture Canada, and the teaching community.

Currently the committee is working on a display that will be made available to counties who are coordinating agricultural awareness exhibits. Enlarged photographs, and labels are part of the exhibit.

An educational kit on soils and conservation is being developed. It will include a teachers guide and "hands" on resources for students.

An Agricultural Ambassador project was initiated to identify the farmers interested in doing classroom presentations or hosting class tours at their farms.

The Atlantic Winter Fair school program was held with 4,600 children and 1,240 teachers and chaperones visiting the 12 activity spots featuring Nova Scotia Commodity groups. Very positive teacher evaluations and positive comments were received.

Many of the committees projects have been funded under the agricultural and Food Development Agreement and the day to day costs from the N. S. Department of Agriculture, and in kind donations from the Federation of Agriculture. Through AFDA funding, Marlene Horgan has been working part-time to carry out the work of the committee and does the final edit on the Agricultural Awareness Newsletter.

SECTION III WOMEN'S INSTITUTES OF NOVA SCOTIA

of Institutes in Province 109 (111)

# of Members in Province 1654 (1667)

I. REGIONAL	# OF	ATTENDANCE	II. PROVINCIAL	# OF	ATTENDANCE
Home Calls	54	--	Prov.of area Conv	1	175
Office Visits	118	--	Board Meetings	3	54
W.I. Branch Meetings & Programs	27	446	Committees	2	15
Workshops	15	120	Farm Women's Comm.	4	20
Program Planning Meetings	31	376	Farm Women's Conf.	1	55
Spring Executive	19	663	Farm Women's Conf. Committee	3	18
Rallies	14	585	Special Events	5	460
			Other	1	50

III. SPECIAL PROGRAMS:

Guysborough Women's Day
Food Fantasy Show - Kings District
Provincial Competition (Craft) Training Workshop
Personal Development Programs - (2)
Meeting Management Workshop Pictou County
Festival of Trees - 2500 to regional hospital
Leadership Workshop - Hants Central
Cape Breton District Dinner

The W. I. Office is staffed by Sandy Savage, Executive Director, and Theresa Osborne. Theresa is responsible for looking after the Infant Seat Rental Program. Women's Institutes have a new branch formed in Guysborough County. It's great news to report since W.I. has continued to see a decline in branches over the years. Membership numbers are down slightly although not as much as some years previously.

The strong W. I. districts are those districts with special activities to keep interest and enthusiasm. For example, the Cape Breton District worked with the Festival of Trees project. Local tree producers donated trees; W. I., 4-H and other groups decorated the trees and they were on display for the public to view. The decorated trees were auctioned off and the proceeds ($2,500 went to the local hospital).

Guysborough held a Women's Day which was a series of educational workshops of interest to the women.

The Food Fantasy Show (reported on in Section II) was coordinated with the Kings Districts. The districts promote the event, sell tickets, look after the physical set up, etc. It serves as a fund raiser for the district.

The Farm Women's Committee is formed by the Women's Institutes to deal with issues of concern to farm women. They undertook the Farm Safety Competition to promote farm safety.

Farm Women's Conference

The "Challenge of Change" was the theme of the Farm Women's Conference held recently in Truro with fifty-five delegates attending. The Conference featured the premiere showing of the video "Women In Agriculture". The video highlighted four Nova Scotia farm women and their involvement in the agricultural industry. These women included: Anne Forbes, Dairy Farmer of Debert, Nancy Kent, Nutritionist with Clarence's Farm Services, Truro; Rita Mitchell, Poultry Farmer of Oxford and Marion Inglis, Apple Producer of Tupperville.

A panel of farm women also shared key ideas of what they do to keep up with the challenges of change. Ronalda Woodworth spoke on Farm Labor emphasizing a good working environment, job descriptions, praise and motivational techniques with employees. Elspeth McLean-Wile, with Promotion, talked about the importance of good signage. Arlene MacGregor highlighted the farm tours for school children on her farm and included tips and hints on conducting these tours. Mary Brown shared her experience in farm organizations and encouraged farm women to become more involved.

The messages from the panel members were reinforced in the talk given by Agricultural Representative, Yvonne Thyssen-Post. She stressed that the key to participation and respect for both men and women within an industry is being knowledgeable about the industry and having the ability to work with, and understand people.

Workshop sessions on Farm labour with Maria Bucher, Promotion with Mary Elizabeth Stewart, Agricultural Awareness with Jean Ward and Jane Lewis, and Farm Organizations with Peter Clarke, gave women attending the chance to learn what they could do to help develop their industry. These workshops were followed by sessions on a rural day care study, and elder care options.

A session on landscaping and visits to the special displays completed the evening program.

The second day of the Conference featured a series of sessions on getting organized through management techniques and time management, results of a Nova Scotia study on respiratory diseases in farmers, the role of the retailer in Nova Scotia farm products, Rural Watch and Crimestopper programs.

The purpose of the Conference was to bring farm women together to share, learn, and make new friends. Those who participated agreed that these goals had been achieved. They appreciated hearing other farm women speaking and making presentations; it gave them encouragement that they could get involved too.

SECTION IV — 4-H YOUTH PROGRAM

of Clubs in Province 126 (126)
# of Members in Province 2967 (2805)
# of Homemaking Leaders 440 (394)
Homemaking Members 1761 (1684)
% Project Completion 89.7 (86.5)
# Leaders 1050 (985)

LOCAL	# OF	ATTENDANCE	INVOLVEMENT
Client Calls	126	-	Counselling, advisor, club organization, leader development
Office Calls	332	-	Answering requests, counselling
Judging practice, club meetings, sub-committee meetings	130	2801	Advisor, resource person, instructor, facilitator
Achievement Days	110	7157	Judge, resource person, staff
Judging Sessions Marking Days	29	2689	Judge, staff
Workshops	25	1193	Resource person, co-ordinator, instructor
Exhibitions	13	9,200	Coordinator, supervising
Regional & County Rallies	8	920	Organizer, judge, resource person, P.R.
Special Events	18	4,721	Staff Advisor
Other-Award interviews, staff meetings, exhibition meetings	51	301	Advisor, coordinator, interviewer, resource person, P.R.

PROVINCIAL	# OF	ATTENDANCE	INVOLVEMENT
4-H Weekend	1	800	Judge, coordinating competition, advisor
Teen Leaders Development	1	56	Staff
4-H Show Comm. & Sub.	14	85	Hosting, resource, advisor, coordinating competitions, etc.
Provincial Council & Sub	6	75	Advisor, Staff
4-H Show	1	10,000	Staff, coordinator, advisor
4-H Summer Staff Orientation	1	7	Presenter

PROGRAM DEVELOPMENT

Cape Breton Island 4-H Craft Co-op Formation
Manual Revisions & New Releases
-Meat & Alternates
Computer Input of Manuals
Camp Rankin Menu & Food Purchasing
4-H Scholarship Judging
Regional Workshops (6)(Effective Presentations, Etiquette, Executive Training, Project Updates & Ideas, Public Speaking, Money Management)
Marilyn Naugler Crafts Workshop
New Leaders Workshop
Leader Video on Co-ordinating Fashion Show
Craft Workshop(3)

Looking at the tables, there is an increase (77) in the members enroled in "Homemaking" projects which includes: Sewing, Crafts, Foods, Heritage, and Cake Decorating. This reflects one-half of the increase in 4-H project enrolment over the previous year. Also, of the 2,967 4-H members, 1,761 were enroled in the homemaking projects. The project completion rate for homemaking (which is the percentage of members who enroled who actually completed) is up 3.2% to a high of 89.7% (86.5). This rate is second only to the 175 horticulture members.

Nova Scotia has been successful in receiving money to coordinate a leader's training workshop from Imperial Oil. The workshop will be held in '92 and will be aimed at the Foods, Heritage and Cake Decorating project leaders.

Interested 4-H leaders and members in Cape Breton have formed the Cape Breton Island 4-H Crafts Cooperative. Their first sale was at a Christmas Crafts Show and had over $2,000 in sales.

The 4-H homemaking manuals continue to be entered on computer, however, there are only a few left to do. This will make the annual revisions much easier and faster.

The Regional Home Economists are technical advisors to the homemaking aspect of the program, but also regionally work closely with the 4-H rep in leadership development aspects of the program.

SECTION V FARM & AGRICULTURE RELATED ACTIVITIES

	# OF	INVOLVEMENT & PURPOSE
Community Fairs, Festivals	7	Organizer, judge, advisor
Exhibitions, Evaluation Committee	15	Hired judges, advisor, evaluator
Safety Workshop	1	Coordinator, education
County Farm Women's Day	5	Coordinator, advisor
Young Farmer's Conf. & Committee	3	Chair, committee
Judging Standards		Editor of Manual
Judges List & References		Coordinator
AFDA Meetings	10	Dept. Rep.
Federation/Commodity Meetings	12	Dept. Rep, presented report
Farm Health & Safety Planning Meetings & Competition	7	Committee member, county facilitator
Farm Health & Safety - Sub & Projects	6	Coordinator, staff
Extension Newsletter & Committee	4	Staff
Kiwanis Farm Family Award Committee	1	Advisor, committee
Agricultural Advisory Board	1 day	Dept. Rep on committee
Farm Safety Competition & Committees	2 day	Facilitate County involvement
SAAP - Sydney Area Agricultural Personnel	10 days	Team planning, program coordination
Agriculture In The 90's	1 day	Advisor/participant
Dairy Kitchen Meetings	5 days	Needs Assessment
Farm Conference Planning Committee	2.5 days	Advisor
Regional Agriculture (NSDAM & ECBC) Planning	1 day	participant
Home Study Course	6 weeks	Coordinator
Client Input Meeting	6	Staff
Federation - Special Events	2	Participant
College Royal Judging classes	½ day	
Success & You in '92	1	Planning Committee

This Section includes a host of activities that are related to agriculture and the farm but do not fit under the Agricultural Awareness aspect of our work. In many cases it involves the advisory counselling, coordinating and developing role of the extension worker.

The Section did not hold a judging clinic in 1991 but provided the exhibitions with up-to-date lists of trained judges and revised judging standards. A clinic will be held in 1992.

The Dairy Kitchen meetings in Inverness County provided an informal means of doing a needs assessment. The Home Economist participated in these with the Ag. Rep.

A series of client input meetings were held in six regions in the province. This provided an opportunity for extension clients to comment on the work of the Extension Branch and give it future direction. The need for more work in agriculture awareness was identified in each of the six sessions.

The Home Study Course was offered again as a six week course on basic money management. Even though it's recessionary times, the registration was low initially, however, in total for the year the numbers improved.

SECTION VI OTHER ACTIVITIES

PROFESSIONAL DEVELOPMENT

	# OF	INVOLVEMENT & PURPOSE
Meeting Management Workshop	2 days	Participants (3)
ACEEE	5 days	Presenter, Home Ec Rep
Home Ec Staff Meetings	4 days	Staff
NSIA Meetings & Sub	13	Participant/Secretary
Impromptu Presentations	2 days	Participant
Regional County Office Staff Meetings	11	Staff, participant
Agriculture in the Classroom Conf.	3 days	Participant
Situational Leadership Seminar	2 days	Participant
Team Building Workshop	2 days	Participant (2)
Dealing With Difficult People	1	Participant
AIC/CSE Meetings	3 days	Director, Presenter
Stress Seminar	1	Participant
Writing Workshop	1	Participant
Supervisors Meetings	4	Supervisor
Staff Evaluations, Visits	9	Staff
Heart Health-Publication Ed. Committee	5	Home Ec Rep
Extension Staff Meeting	1	Staff
Gender Development	½ day	Staff
CHEA Professional Development	5	Participant/Chair
CHEA Conference	1	Home Ec Rep
Decision Making & Problem Solving	1	Participant
New Staff Workshop	1	Participant
Management Training	1	Participant
Human Resources Library Project	-	Project Leader
Project Learning Tree	1	Participant
Weavers Conference Fashion Show	1	Coordinator

OTHER

	# OF	INVOLVEMENT
Status of Women - Sub-Committee	13	Dept. Rep.
Natural Resources Co-ordinating Comm(LLRC)	1	Dept. Rep.
N.S.A.C. Day Care Board of Advisors	3	Staff Rep
Sunsense Display	1 month	Home Ec/Ag Rep
Women In The Workplace Committee & Sessions	10 days	Chair, Co-ordinator
Home Ec. Promo Display	½ day	Home Ec/Ag Rep
Home Study Course	6 weeks	Coordinator
C.B. School of Crafts-Brd.of Directors		Advisor
Women's World Finance	1	Speaker
Acadia Student Field Project	3 days	Instructor/Education
Quilts of the Island	3 days	Advisor
Social Science Review Committee	3	Staff
Minister/Deputy Hosting Meetings	3	Co-ordinator
Canadian Agricultural Extension	1	N.S. Rep
N.S.D.A.M. Safety Comm. & Sub	11	Secretary/Building Rep
Money Management Workshops	5	Presenter
Seniors Games	2	Judge, Resource Person
N.S.A.C. Open House	1	Staff

CATALOGUED PROGRAMS REQUESTED:

Regional Offices	-	41
Transparencies	-	3
Slides	-	39
Package Programs	-	53
Videos	-	132
TOTAL	-	268

A trained staff is important to the Section. This Section highlights the training opportunities, staff planning meetings, and professional development the staff participated in.

Also under AFDA the final phose of the Human Resource Development Resources Project is being implemented. This has allowed for the purchase of books, videos, and audio tapes for personal improvement or to help staff in the development of programs and training the clients. The use of this library is not exclusive to Extension Branch staff, but the library is

maintained by Extension staff.

The Section continues to lend resources (slides, educational packages, etc.) to teachers and community groups. They are getting quite outdated. With the trend towards videos, we would like to move in that direction. The commodity boards continued with the Food Products & nutrition coupons to schools valued at $85.00 for this school year. Schools showing proof of purchase of the commodities get reimbursed up to a certain value.

CLOSING

Writing the Section's Annual Report causes one to reflect back over the year at our accomplishments. A highlight and an excitement is in the development of the Agricultural Awareness area. It is not only because of a new program area but the recognition by the industry of the job we are and can do for agriculture.

This also gives me a chance to say a special thank you to the Home Economics staff. Each Home Economist brings something special to the job and as a result uniqueness to her regional program. It's not only that but the professionalism demonstrated as you take on the responsibilities of your job - from terrific presentations at the Department Staff Conference, the fine representation of the Section on outside committees and conferences, to the development of new and exciting programs, to bring on the job at challenging personal times, and to the conscientious approach to doing things such as the preparation to the client Input Meetings. Thank you.

A special thanks to Margie Johnson who perseveres through my endless stacks of work and my interruptions and is trying to learn new things on the computer at the same time. Also, to Carolyn Rushton who is helping out too especially with putting the manuals on computer.

Thanks to Liz Crouse for her enthusiasm and humor, Bob Bennett for his honest approach to things; and Dave Sangster for his guidance.

I look forward to 1992, the new challenges and new developments particularly in the area of Agricultural Awareness.

Respectfully submitted,

Susan Horne

Susan Horne, Supervisor
Home Economics Section

1991
4-H SECTION ANNUAL REPORT

FOR THE YEAR ENDING: DECEMBER 31, 1991

SUBMITTED BY: ELIZABETH CROUSE-PAGE
4-H SUPERVISOR

4-H & RURAL YOUTH ANNUAL REPORT
1 9 9 1

The 4-H theme "4-H Fun in '91" and the enthusiasm it generated was certainly evident in the 4-H statistics for this year. 4-H membership continued its increasing trend in Nova Scotia as it rose by 162 members. Numbers of this magnitude have not been seen since 1985. Of particular note is the increase in 4-H leaders from 985 to an all time high of 1050. Even with such significant increases in numbers, project completion also rose by 1 percent to 86.6 percent. Please refer to Table 1-3 for the 1991 statistical summaries.

NOVA SCOTIA 4-H COUNCIL:

The Nova Scotia 4-H Council met as an executive in January, March, May, July, and October. The Annual Meeting was held in November. It featured three sessions. One on "Fund Raising," one on "Voice of the Children Campaign," and a two hour workshop on "The Future of 4-H."

The Nova Scotia 4-H Council Executive for 1991 were:

- Bev Patterson, President
- Judy Wile, 1st Vice-President
- Allison Magee, 2nd Vice-President
- Hob MacLeod, Past President
- Barbara White, Secretary
- Elizabeth Crouse, Treasurer
- Jean Brown, Hants/Kings Region Director
- Eileen Whalen, Cape Breton Region Director
- Grant Reeves, South Shore Region Director
- David Castle, Central Region Director
- Colleen Hogg, Eastern Region Director
- Ron Baker, Western Region Director
- Susan Horne, Staff Advisor
- Brad Parker, 4-H Host
- Cindy Rent, 4-H Hostess
- Mary Magee, Canadian 4-H Council Representative
- Marlene MacMillan, Rural Beautification Representative
- Sisca Bekkers, Atlantic 4-H Committee Representative

The council was very active this year. The summer meeting was held at Camp Rankin to introduce all the executive to the provincial facility. The Annual Meeting featured a workshop on "The Future Direction of 4-H."

NOVA SCOTIA 4-H WEEKEND:

The 1991 4-H Weekend was held the second weekend in May at the Nova Scotia Agricultural College. The winners of the various competitions were:

Senior Public Speaking: Brendon Hemens, Antigonish County
Intermediate Public Speaking: Travis Eisnor, Lunenburg County
Junior Public Speaking: Beau Blois, Hants County
Top Junior Introducer: Kimberly Levy, Kings County
Top Junior Thanker: Ryan Thompson, Pictou County
Junior Single Demonstration: Jennifer MacKenzie, Pictou County
Senior Single Demonstration: Paul Jones, Annapolis County
Senior Team Demonstration: Mathew Crouse and Warren Cox, Kings County
Junior Team Demonstration & Top Overall Team Demonstration: Julie Peterson & Michelle Brennan, Yarmouth County
Junior 4-H Poster: Dianne MacDonald, Antigonish County
Senior 4-H Poster: Shawna Armstrong, Queens County
Junior 4-H Decal: Helina Jeromel, Inverness County
Senior 4-H Decal: Sheryl Dykman, Halifax County
Top Woodsman Team: Antigonish County
4-H Host: Brad Parker, Hants County
4-H Hostess: Cindy Rent, Hants County
Top Junior Modern Square Dance Team: Harmony Nicholsville 4-H Club, Kings County
Top Senior Modern Square Dance Team (Prepared Dance): Arm of Gold 4-H Club, Cape Breton County
Top Senior Modern Square Dance Team (Compulsory Calls): Loch Clover 4-H Club, Antigonish County
Top Junior Old Time Dance Team: Loch Clover 4-H Club, Antigonish County
Top Senior Old Time Dance Team (Prepared Dance): Foremost 4-H Club, Antigonish County
Top Senior Old Time Dance Team (Compulsory Calls): TNR 4-H Club, Colchester East Hants
Overall Old Time: Foremost 4-H Club, Antigonish County
Overall Modern: Arm of Gold 4-H Club, Cape Breton County

National 4-H Travel Awards were also presented at 4-H Weekend. The following were the selections:

<u>National 4-H Conference, Washington, D.C. - April 4-14, 1991</u>:

Darcey Baker, Annapolis County

<u>Dairy Conference, Madison, Wisconsin - October</u>:

Color Breeds: Richard Bond, Hants County
Holstein: Nicki Ballam, Colchester East Hants

<u>National 4-H Members' Conference - November 6-10, 1991</u>:

1. Lisa George, Kings County
2. Nova Dawn Brewer, Lunenburg County
3. Randy Pearle, Annapolis County
4. Tracey Shinners, Cape Breton County
5. Krista Brydon, Kings County
6. Janet Rieksts, Antigonish County

Citizenship Seminar, Ottawa - April 5-11, 1991:

1. Bev Shaw, Annapolis County
2. Kara Redden, Halifax County
3. Nathan Sampson, Richmond County
4. Karl Linton, Hants County
5. Laurie Haslam, Pictou County
6. Sean Chisholm, Antigonish County

Career Conference, Winnipeg - March 9-17, 1991:

1. Heather Austin, Inverness County
2. Warren Cox, Kings County

Interprovincial 4-H Exchange - July 2-16, 1991:

Newfoundland	• Jennifer Davison, Hants County
Alberta	• Jeff Longley, Annapolis County
Saskatchewan	• Aaron Manning, Pictou County
Ontario	• Michelle Hoare, Cumberland County
New Brunswick	• Karen McKay, Colchester East Hants

Nova Scotia 4-H Council Scholarship:

Jillian Hollis, Pictou County

Canadian National Exhibition Scholarship - August 24-28, 1991:

Terry MacIntyre, Cape Breton County

Petro-Canada Youth Leadership Awards:

1. Tracey Shinners, Cape Breton County
2. Brendon Hemens, Antigonish County

Leader Travel Opportunities:

(a) **Manitoba 4-H Conference** - Judy Nickerson, Yarmouth County

(b) **Chaperones** - **Scotiabank Hays Classic** - Debbie Masters, Colchester County
- **Knobb Hill Beef Heifer** - Joy Palmer, Hants County

National 4-H Leaders' Conference - November 6-10, 1991:

1. Hattie Smith, Cumberland County
2. Phil DeMille, Yarmouth County
3. Helen Marie Giffen, Guysborough County
4. Anna Taylor, Colchester East Hants
5. Heather Manning, Pictou County

Leonard Best Memorial Award:

1. Brad Parker, Hants County
2. Cindy Rent, Hants County

NOVA SCOTIA 4-H SHOW:

Hants and Kings Counties hosted the 14th Annual Nova Scotia 4-H Show at the Hants County Exhibition Grounds in Windsor. The organization by the hosting counties was superb.

The Provincial 4-H Show Committee consisted of:

Chairman: Bev Patterson, Hants County

Secretary: Elaine Maxner, Hants County

Members: Vivian Mitchell, Lunenburg County
Pat Whidden, Halifax County
Stephen Phinney, Annapolis County
Chasity Chase, Kings County

Staff Advisors: Susan Horne, Supervisor, Home Economics, NSDAM
Elizabeth Crouse, Provincial 4-H Supervisor, NSDAM
Ruth Withrow, 4-H Representative, NSDAM
Donnie Langille, Acting 4-H Representative, NSDAM

Thanks once again to the Farm Credit Corporation's computer program, the thousands of calculations were done completely and efficiently. The organization of the show continues to be a major challenge as the numbers and expectations grow.

The Nova Scotia 4-H Steer and Lamb Show 'N' Sale was again held at the 4-H Show. Fourteen (14) steers and fourteen (14) lambs were shown in 1991.

The Grand Champion Lamb was owned by Jennifer MacDonald of Antigonish County. The 100 lb. lamb sold to Parker's Esso of Middle Musquodoboit for $6.80/lb. The Grand Champion Steer was shown by Andrew van Oostrum of Kings County and sold for $2.10/lb. to Maple Leaf Farm Supplies and J.G. van Oostrum.

The lambs averaged $2.90/lb. ($2.37 in '90, $26.5 in '89, $2.59 in '88, $2.72 in '87, and $1.74 in '86). The steers averaged $1.52/lb. ($1.30 in '90, $1.70 in '89, $1.62 in '88, $1.65 in '87, and $1.21 in '86).

One of the highlights of this year's show was the steer purchased by B.P. Stevens was donated back to the Nova Scotia 4-H Council and resold for $2.40 to Stirling Fruit Farms.

This year's committee was chaired by George Lacey of the N.S. Cattlemen's Association. The committee members were:

- Jim Neary, Treasurer
- Gary Burley
- Buddy MacDougall
- Allan Palmer
- Wallace MacKay
- Tom Nunn
- Anthony van Oostrum
- Henry Bowers
- Elizabeth Crouse, Secretary

Frank Berkelaar once again volunteered his auctioneering services.

4-H STAFF:

A number of changes occurred in the 4-H staff in 1991. As of December the following were the 4-H Staff:

Provincial 4-H Supervisor - Elizabeth Crouse
Provincial 4-H Secretary - Michelle van Oirschot

Regional Offices:

Cape Breton	- Alan Porter, Sydney
	- Cheryl Butts MacMillan, Mabou
Eastern	- Jeff Wentzell, Pictou
Valley	- Ruth Withrow, Windsor
Central	- Bill MacLeod, Truro
South Shore	- Mary Ann Oulton, Bridgewater
Western	- Marianne Ward, Lawrencetown
	- Gwen Whitman, Acting 4-H Secretary, Part Time

Barb Headdy, 4-H Secretary in Lawrencetown, retired after 13 years in that position. Lynn Thurber is on disability leave. Donnie Langille was Acting 4-H Representative in Windsor for six months while Ruth Withrow worked in Truro as a six month Program Co-ordinator. This change was to accommodate the 4-H Supervisor's maternity leave.

I want to say a special thank you to the 4-H Staff. Their dedication to the 4-H program is unequaled. They are hard workers and enthusiastic.

4-H SUMMER STAFF:

The 4-H Summer Students are a tremendous asset to the program. Their skills are wide and varied.

The Summer Students were:

Mabou	• Danny Davison
Antigonish	• Marina Gough
Truro	• Mary Ann Oulton
Nappan	• Aaron Sweeney
Windsor	• Rhonda MacDougall
Yarmouth	• Pam Bond

ATLANTIC 4-H COMMITTEE:

This committee met twice in 1991. Nova Scotia was represented by the 4-H Supervisor and Ruth Withrow as well as the Nova Scotia 4-H Council's delegate, Sisca Bekkers. Nova Scotia hosted the Interprovincial Exchange Send Off as well as the Eastern Breeders Incorporated Atlantic Future Dairymen's Event on behalf of this committee.

CAMP RANKIN:

Four weeks of Junior Camp and one week of Intermediate Camp comprised the camping season. Camps were filled to capacity again this year with a waiting list of applicants.

Camp staff were:

Director	• Jon Davison
Assistant Director	• Jill Eaton
Cook	• Marilyn McKay
Assistant Cook	• Laurie Haslam
4-H	• Adam MacIntyre
Water Safety	• Tracey Samson
Drama & Arts	• Jillian Hollis
Crafts	• Catherine Buchanan
Recreation	• Dawn Barrington
Nature Study	• Josh Kilburn
Canoeing	• Nathan Sampson

4-H members in the Counsellor-In-Training Program were a part of all camps. This program identifies potential counsellors.

4-H STAFF TRAINING:

4-H Staff took advantage of many opportunities for upgrading their skills over the year. We participated in: Improving Your Writing Skills, Conducting Effective Meetings, Dealing with Difficult People, Managing Effective Meetings, The Client Input Survey, and Summer Assistants orientation meetings to name a few.

OTHER PROVINCIAL PROGRAMS:

Provincially a conference, "Teen Taking the Lead," was held for 50 Junior Leaders. The February Conference was held in Truro.

The EBI Future Dairymen's Event was hosted in Nova Scotia for 50 Dairy Members and their calves. It was the second year for this program.

The 4-H News Section of Extension News was prepared four times in 1991.

OTHER:

Regionally the 4-H Representatives carry a large number of special programs. A partial list follows:

- Winter Carnivals
- Junior Tours
- Senior Tours
- Exhibition Programs
- Awards Banquets
- Mall Displays
- Farm Safety Displays at Malls
- Livestock Clinics
- Halifax County Kiwanis Award
- Leaders Appreciation Nights
- Senior Members Camps
- Chat-a-Rama
- Marilyn Naugler Craft Workshop
- Regional Leaders Workshop
- Joint Achievement Days
- Horse Camps
- Dog Project Drill at Musical Ride
- Joe Chisholm Seminar

Assisting with fund raising activities including: Cheese, Din-a-Night, flower sales, chocolates, fudge, and grocery baskets.

4-H IS FOR U IN '92:

1992 looks like an exciting 4-H year. A host of new programs are in the planning stage. They include a Provincial Fund Raising Campaign, an Entrepreneurship Award, an Atlantic Beef Calf Workshop, an Outdoorsman Competition, and a Veterinary Science Project Weekend.

IN CONCLUSION:

The 4-H Section ended 1991 on a very enthusiastic note. A full contingent of 4-H Staff were in place. Of special mention is the excellent working relationship that exists between 4-H and Home Economics. Special thanks to Susan Horne for all her help and support. To Bob Bennett and Dave Sangster, thank you for attending as many 4-H events as you did. It is great to have the support of all the department members who volunteer time to 4-H.

I could not conclude without saying a special thanks to Michelle van Oirschot. Her hard work helps to make the Provincial 4-H Office a high energy, high output office.

I look forward to 1992 and the 70th Year of 4-H in Nova Scotia.

Respectfully submitted,

Elizabeth Crouse

Elizabeth Crouse, P.Ag.
4-H Supervisor

EC/mvo

TABLE #1
1991 STATISTICS

Region	Membership Boys	Girls	Total	# of Clubs	Leaders Senior	Junior	Average Tenure Senior Leaders	4-H Members Average Age	Tenure	Average Club Size	Projects Enrolled	Completion Number	Percent
Hants/Kings	238	299	537	20	172	3	4.3	11.7	2.4	26.9	712	621	87.2
Annapolis/ Digby/Yar-mouth	92	181	273	17	110	6	2.7	12.5	1.9	15.9	490	409	83.5
South Shore	90	157	247	15	111	3	4.3	12.6	2.3	16.5	414	356	86.0
Central Region	257	362	619	28	238	28	4.4	13.1	2.3	22.1	1235	999	80.9
Eastern Mainland	358	543	901	28	299	27	3.5	12.1	2.2	32.2	1475	1395	94.6
Cape Breton Island	123	267	390	18	120	11	3.9	12.1	2.0	21.7	599	487	81.3
Nova Scotia	1158	1809	2967	126	1050	78	3.9	12.4	2.2	22.6	4925	4267	86.6

Year	Average # Projects Taken	Membership Boys	Girls	Total	# of Clubs	Leaders Senior	Junior	Average Tenure Senior Leaders	4-H Members Average Age	Tenure	Average Club Size	Projects Enrolled	Completion Number	Percent	Aver. # Projects Complete
1991	1.7	1158	1809	2967	126	1050	78	3.9	12.4	2.2	22.6	4925	4267	85.6	1.5
1990	1.7	1126	1679	2805	126	985	79	3.8	12.3	2.4	22.3	4777	4062	85.0	1.5
1989	1.7	1090	1606	2696	125	963	81	4.4	12.7	2.8	20.3	4638	4070	87.5	1.5
1988	1.7	1125	1805	2933	131	962	86	3.5	12.4	2.5	22.4	4704	4033	85.7	1.5
1987	1.6	1133	1791	2924	134	902	91	3.5	12.3	2.4	21.1	4600	3826	83.2	1.3
1986	1.5	1066	1676	2742	132	965	70		12.8	2.8	20.9	4287	3511	81.9	1.3
1985	1.5	1179	1800	2979	134	863	69		12.9	2.4	22	4462	3666	82.0	1.2
1984	1.5	1259	1889	3148	140	871	103		13.0	2.2	22	4815	3846	80.0	1.2
1983	1.6	1266	1874	3140	137	795	120			2.3	23		3854	79.0	1.3

TABLE #2
PROJECT INVENTORY 1991

PROJECT AREA	PROJECT	#'S REG.	COMPLETION NUMBER	COMPLETION PERCENT
Homemaking	Crafts	927	852	91.9
	Sewing	239	215	89.9
	Foods	367	326	88.8
	Cake Decorating	146	112	76.7
	Heritage	82	74	90.2
	TOTAL	1,761	1,579	89.7
Livestock	Dairy Calf	374	336	89.8
	Dairy Yearling	33	28	84.8
	Beef Calf	243	202	83.1
	Beef Yearling	11	11	100.0
	Lt. Horse-English	106	97	91.5
	Lt. Horse-Western	190	159	83.6
	Draft Horse	23	18	78.3
	Horse Driving	5	4	80.0
	Horse-Other	39	28	71.8
	Poultry	79	76	96.2
	Dog Obedience	108	89	82.4
	Sheep	84	75	89.3
	Sheep Yearling	17	16	94.1
	Dairy Goat	72	68	94.4
	Dairy Goat Yearling	20	18	90.0
	Swine	8	6	75.0
	Rabbit	275	238	86.5
	Oxen	16	14	87.5
	Veterinary Science	36	27	75.0
	Market Steer	24	20	83.3
	Market Lamb	18	18	100.0
	TOTAL	1,781	1,548	86.9
Horticulture	Garden	102	94	92.2
	Floriculture	73	69	94.5
	TOTAL	175	163	93.1
Other	Woodworking	397	325	81.8
	Outdoorsman	274	226	82.5
	Fisheries	16	13	81.3
	Photography	156	110	70.5
	Small Engine	41	34	82.9
	Welding	7	4	57.1
	First-Aid	98	89	90.8
	Self-Determined	13	11	84.6
	Exploring 4-H	91	74	81.3
	Junior Leader	81	61	75.3
	Tractor	23	20	87.0
	Other	11	10	100.0
	TOTAL	1,207	977	80.9
GRAND TOTAL		**4,925**	**4,267**	**86.6**

TABLE #3 4-H OFFICE STATISTICS		
	1990	1991
Number calls on clients	1,069	1,010
Number office calls	1,889	1,770
Number short courses, meetings, tours attended	898	952
Number attending short courses, meetings, tours	44,787	45,974
Number letters written	18,749	22,948
Number publications and circulars distributed	22,364	25,134
Number radio and T.V. broadcasts	262	257
Number newspaper articles written	307	255

Extension Agricultural

Engineering Section

Annual Report 1991

Extension Services Branch
Nova Scotia Department of
Agriculture & Marketing

INTRODUCTION

The work of the Extension Agricultural Engineering Section involves the provision of technical support services for Government programs to assist farmers and the agricultural industry in the construction of capital works. These works include all types of farm structures for livestock housing, crop storage and handling, land development works and land protection works. The Section is also involved with providing construction and technical services related to farm mechanization, crop processing and storage, as well as energy conservation and utilization.

Staff

The staff complement of the Section is made up of the following people.

Agricultural Engineers	9
Agricultural Technicians	8
Aboiteau Superintendents	4
Casual Technicians	4
Clerical	3
Total	**28**

In October, Bill Morley, one of our district aboiteau superintendents was seconded to the Crop and Livestock Insurance Commission, reducing the number of aboiteau superintendents from 5 to 4.

There were also 20 seasonal labourers with the Section for varying periods of time to carry out the Land Protection work.

For the purposes of this report the work of the Section is reported under two major program areas consisting of **Soil and Water** and **Technical Services** to reflect the program areas under the two Engineering Supervisors. Miscellaneous and general matters are included at the end of the report.

SOIL & WATER

Drainage, Irrigation and Ponds

A steady demand for assistance with drainage is still being encountered. As the drainage companies do a better job of surveying for drainage, our staff plan to get less involved in that aspect. However, because of environmental concerns, we are doing more surveys for surface ditching, especially if they are on steeper grades or if they enter larger streams. Staff are working with the Nova Scotia Department of Environment and Federal Fisheries to update guidelines as to when permits are required.

In almost all cases, if farm ponds are to be constructed, the farmer requests an engineer to have a look at the site and make recommendations with respect to type and size of pond to construct. In many of these cases, environmental permits are required if dams are constructed. In a prolonged dry year, ponds, unless they have good recharge, are of limited value for irrigation. This year, because of the long dry spell, a larger than normal number of requests for assistance with irrigation were received.

Drainage projects started in previous years, were continued. Good data was obtained from the drainage project in Cumberland County, which at this time appears to confirm that we cannot justify installing tile at closer than 40 feet spacing. With the subsoiling projects, it is too early to conclude there is any positive benefit from subsoiling.

Surveys

With the excellent weather in early 1991, it provided ideal conditions to carry out survey work. This resulted in not accumulating a long waiting list for survey work. Staff did not have to carry out detailed survey for the Blueberry Levelling Project in the fall which enabled the survey group to stay current with demands for their services.

Farmers are becoming more aware of environmental concerns and this results in more requests for survey work and recommendations, with respect to ditch size and problems that could be encountered if steep grades are involved. Some legal survey is being carried out on dyke right of ways. A legal survey was also carried out for the Nova Scotia Farm Loan Board

Farm Ditch Profiled	261,360 feet
Farm Ditch Staked	309,798 feet
Dyke Profiled	145,363 feet

Land Forming Survey	694 acres
Main Outlet Drainage Profiled	158,245 feet
Main Outlet Drainage Staked	91,650 feet
Survey For Tile Plans	185 acres
Topo Survey For Irrigation Lev. etc.	319 acres
Farmstead Survey	16 farms

Dykes and Aboiteaux

Replacement of aboiteaux is going at a steady pace. This year we went to the limit of what polyethylene pipe would do, lining a 30" x 42" rectangular wooden sluice with flattened 36" diameter pipe. A total of eleven aboiteaux were rebuilt by lining. We also carried out a most difficult type - one aboiteau that has three barrels. All pipes and gates have to be installed during one tide cycle.

With the next 18 year high cycle in tides occurring during 1994, we are taking a close look at dyke heights and conditions. If some capital funding can be obtained each year, we may be able to keep our aboiteaux in good repair. In the long term, this will be very cost effective because of the reduced amount of extensive maintenance that would otherwise be required. We are continuing to look at new ideas and methods for aboiteau repair and construction both to cut costs and labour.

The loss of an Aboiteau Superintendent position for the western part of the Province is going to require some adjustments and will mean we cannot give the same service we have in the past in Kings County and also further west.

Main Outlet Drainage

Main Outlet Drainage was carried out on seven different marshes. In most cases, previously excavated ditches are being cleaned out to improve water flow. In most cases, only a small part of the bottom of the ditch is excavated with the remainder of banks remaining in sod. This program also helps to keep marsh bodies active as the land owners have to get together to make an application. This program is very useful for the dykelands. For upland areas, a lot of lead time is required because it basically has to be requested by a Municipal unit and then the process of environmental approval can take several years or more.

Streambank Conservation

A relatively good year was encountered with the Agricultural Streambank Conservation Program. Work in Margaree was completed as well as Pictou and Colchester Counties. In the

Windsor area, work was carried out above the Causeway where the dyke is now obsolete. (Rock is removed from existing dyke and placed on the river bank.) This proved to be a very cost effective method. The work in Colchester County was included with the Rock Contract for marsh protection and worked very well.

Pictou County	6992 tonnes	11 sites
Colchester County	4677 tonnes	7 sites
Cape Breton	2560 tonnes	3 sites
Antigonish	1600 tonnes	3 sites
Windsor	4250 tonnes	6 sites

Soil & Water Management Program - Part A

A summary of the program statistics is as follows:

No. of Applications received	1034	
No. of applications approved	993	
No. of applications rejected	30	
No. of applications pending	14	
Total value of applications approved		$8,616,531
Grant value of applications approved		$6,462,398
Total value carry-over dollars		$943,551.70

Appendices 1 and 2 show the volumes of work completed for Land Protection and Soil and Water Management Program (Part A) respectively.

TECHNICAL SERVICES

The Technical Services Group is the primary source for the planning, evaluation and advisory input in utilizing both proven and new technology in farm developments related to farm structures and power and machinery. This technology is pre-evaluated and integrated into the design and construction plans required for farmstead projects. Farmstead planning and development projects include livestock buildings, crop storage, manure and waste handling, grain and feed processing facilities, material handling methods and facilities as well as miscellaneous structures such as pesticide storage.

Farm Structures Plans

There is an increasing demand for site and project specific construction plans. These projects require a Custom Design Plan due to the unique nature of the individual farm's requirements. Also the quality and technical detail of all the plans produced must meet the requirements of the farmer, the construction contractors as well as the professional standards of the engineering community.

The following is a summary of the 176 Custom Plan Sets developed over the past year:

COMMODITY	NUMBER
Dairy	31
Beef	50
Swine	13
Sheep	2
Poultry	9
Horticultural	11
Grain and Forage	9
Special Structure	37
Building Components	14
TOTAL	176

Not all projects require a new custom design plan. In many cases, we can utilize plans or sections of plans developed over the past number of years. Also stock plans provided by the Canada Plan Service system can be utilized. Approximately 2500 of these plans were distributed to the industry. While not all plans are utilized for construction purposes, they do assist in providing an Extension service to the client.

To ensure that these plans are understood and developed to the maximum potential, many of the projects require on-farm visits. The structures staff made 601 farm visits relative to farm structures.

Environmental issues are an increasing part of the planning requirements for farmstead planning and operations. Extension Engineers are required to constantly update their knowledge

in this area and come up with new innovative methods of ensuring that the Agricultural Industry remains environmentally friendly. This requires work in areas such as animal housing, material handling, manure management, pesticide use, farm safety for both farm employees and livestock, and animal welfare.

Farm Structures Projects

Some of the projects undertaken by staff or in cooperation with the Agricultural Industry are as follows:

- Screen Inlet Ventilation System
- Plastic Hog Penning
- Natural Ventilation System (5 various designs and projects)
- Anti-slip Concrete Floor
- Evaluation of Free Stall Dividers
- Gravity Manure Handling Systems (2 projects)
- Evaluation of Cellulose Insulation
- Evaluation of Double 10 Right Angle Parlour
- Astro-Foil Insulation
- Silo Restoration
- Forced Air Cooling of Horticultural Crops
- Jenaire Polyvent Air Inlet/Exhaust
- Evaluation of Air Quality in Hog and Poultry Barns
- Milk Centre Effluent Disposal
- Sewer Pipe Pen Partitions
- Review of Cattle Weigh Scales
- Evaluation of Manure Additives
- Pig Pen Flooring Evaluation
- Evaluation of New Technology in Animal Welfare Related Hog Facilities.

Power & Machinery Projects

Although the sale of farm equipment has remained very slow, the demand for information on improved technology in mechanization is steadily increasing. This demand is fuelled by the industry's attempt to remain competitive and by support from the various provincial and federal programs.

Through these policies, programs, and in cooperation with department staff, the Power and Machinery group of the Section have worked on the introduction, promotion, evaluation and proper systems management of this new technology.

The following is a list of some of the projects that have been undertaken:

- Electronic colour sorting of soft fruit
- Development of the Bragg Strawberry Harvester
- Hydraulically operated Alley Scrapers
- Development of a Strawberry Plant Harvesting System
- Tower Orchard Sprayer Evaluation
- Continuous Round Bale Wrappers
- Acadia Sea Plant Harvesting Processor
- Garlic Transplanter
- Harvesting Aids for Cole Crops
- Development of Carrot Packaging Line
- Evaluation of Blueberry Land Leveller
- Manure Handling Equipment
- Evaluation of Spinach Harvester

Power & Machinery Demonstrations & Technical Presentation

There is a continuous interest by farmers in developing an efficient tillage program. Plows are, and will likely remain, the main tool for primary tillage. There were four plowing demonstrations and matches held in various communities throughout the Province. The field days receive strong support from the local dealers who also display equipment at these events.

As well, staff were involved in a number of technical presentations to short courses and producer meetings including:

- Strawberry Growers, annual meeting
- Blueberry Producers annual meeting
- NSAC combine operation course
- Plant Industry planning session
- Pesticide application short course

Atlantic Farm Mechanization Show

The ninth bi-annual Atlantic Farm Mechanization Show was held in March 7, 8, 9th at the Moncton Agrena Complex. The Show was very successful with over 110 exhibitors representing various sectors of the agricultural industry. These industry displays resulted in an impressive show of the latest technology available in the industry.

GENERAL ACTIVITIES

Staff members have been involved in many activities of a general nature which are more interdisciplinary in nature.

Professional Development

Staff members attended a variety of conferences, both professional and general, as well as technical seminars, general seminars and short courses, and professional personnel development courses. These are all very important aspects in keeping up to date and abreast of new technologies and being able to convey that knowledge and technology to the client.

A listing of some of these activities include:

- Atlantic Committee on Agricultural Engineering Annual Workshop
- CSAE Annual Meeting & Technical Conference
- Sustainable Agriculture Conference
- New England Small Fruit & Vegetable Conference
- Investigative Travel to Ontario re edible bean production
- Investigative Travel to Britain to evaluate grain handling facilities
- Maritime Pork Conference
- Construction Association Trade Fair
- TUNS Continuing Education Courses on
    - Autocad
    - On-site Waste Disposal Systems
    - Roofing Techniques
    - Reinforced Concrete Design
    - Environmental Engineering
- Canadian Sheet Steel Institute Seminars
- NSDAM Human Resource Development Short Courses on:
    - Developing Writing Skills
    - Making Effective Presentations
    - Problem Analysis & Decision Making
    - Conducting Effective Meetings
- Investigative Travel to New England to look at milking parlours
- Henson College short course on computer networking
- Staff Section Meetings

Committees

Section Staff are also involved in many other areas of work through various professional and departmental committees and boards.

Some of the committees on which staff members serve include:

- Atlantic Committee on Agricultural Engineering
- All ACAE Advisory Committees
- Canada Plan service Management Committee
- Canada Plan service Series Subcommittees (5)
- Canada/Nova Scotia Stream Alterations Committee
- Environmental Wildlife Committee
- NSDAM Research Committee & NSDAM Engineering Research Review Committee
- Agricultural Research Institute
- NSDAM Committees such as Community Pastures, Limestone, etc.
- AFDA II Soil & Water Implementation Committee
- Professional Organizations, Councils & Committees such as APENS, CSAE, ASAE, NSIA
- Atlantic Land Improvement Contractors Association
- Environmental Task Force on Farm Waste Management
- Nova Scotia Soils Institute
- Atlantic Farm Machinery Institute
- Interdepartmental Technical Flood Committee
- Atlantic Farm Mechanization Show Inc. Committee
- Beef Development Program Committee
- NSDAM Capital Grants Committee
- Canadian Farm Builders Association

CONCLUSION

The Engineering Section continues to experience strong demands for its services from the Agricultural community. Striving to keep abreast of new technology and to supply a high quality engineering service to our clientele continues to be the aim and objective of the Engineering Section.

This report has attempted to briefly summarize the Section activities and accomplishments.

We would like to extend our appreciation and thanks to other members of the Department for their cooperation and guidance over the past year. A special thank you to our Director and Assistant Director for their guidance and support.

I personally want to extend my thanks to each and every member of the Section for their efforts, cooperation and support during the past year.

A special thanks to the clerical staff for their support and very valuable contributions to the operation of our Section.

Respectfully submitted,

J. K. Higgins, P.Eng.
Chief Engineer
Extension Agricultural Engineering Section

APPENDICES

Appendix I

LAND PROTECTION AND MAIN OUTLET DRAINAGE

	Amherst	Truro	Windsor	Kentville
New or completely rebuilt aboiteaux	2	4	3	2
MOD ditch excavated	43,400 feet		29,850 feet	6,350 feet
MOD ditch levelled	3,000 feet		15,900 feet	4,300 feet
Dyke topped		9,100 feet		8,000 feet
Rock tonnage	14,660 feet			11,609 feet

Appendix II

SOIL AND WATER MANAGEMENT (A) - STATISTICS 1991-92

March 31, 1992

CATEGORY	UNITS OF WORK COMPLETED	TOTAL COST	# OF JOB	AVERAGE COST
Apple tree removal	14,887 trees	39,509.93	51	2.65
Debris removal	200.85 acres	166,029.42	98	826.63
Ditch spoil levelling	170,354 feet	58,980.23	82	0.35
Firebreak	42,429 feet	7,533.65	14	0.18
Blueberry land development	1,757.90 acres	744,052.74	110	423.26
Blueberry land clearing	308.5 acres	60,672.15	42	196.67
Land clearing	2,013.65 acres	1,845,236.25	337	916.36
Land forming on dykeland	734.8 acres	262,839.68	62	357.70
Land levelling	504.25 acres	182,492.13	140	361.91
Land ripping	14 acres	2,100.00	1	150.00
Surface ditching	521,934 feet	309,911.03	226	0.59
Windrow removal	30,990 feet	59,433.33	39	1.92
Roads on dykelands	18,897 feet	27,246.60	23	1.44
Underdrainage	4,124,382 feet	2,917,030.45	383	0.71
TOTALS		6,683,067.59		

* Includes carry-over dollars from 1991-92.

** Does not represent an accurate average cost.
Many jobs recorded as zero acreage.

REPORT

ON

SPECIAL PROJECTS

EXTENSION SERVICES BRANCH
1991

1991 ANNUAL REPORT

The Committee met four times during the year to initiate and encourage health and safety projects, discuss issues and concerns and exchange information. Our mandate continues to be "taking leadership in promoting health and safety in the farm community."

ACTIVITIES

Our Committee cooperated with the Farm Women's Committee of the Women's Institutes of Nova Scotia in the 1991 Farm Health and Safety Competition and provided financial assistance for the Competition. Five regional winners competed in Truro in October with the Pictou-North Colchester Federation of Agriculture team placing first.

Farm safety articles were prepared and included in each issue of the Extension Newsletter which is mailed out quarterly to farmers and 4-H members.

The Safety Booth display relating to Safe Storage and Use of Pesticides was used several times during the year for exhibitions and special events. A special Sunsense display was also set up at the Kentville Agricultural Centre during the summer months. We also cooperated with the Farm Safety Booth at the Atlantic Farm Mechanization Show held in Moncton last winter.

Radio broadcasts and other safety information were prepared during Farm Safety Week, July 25 - 31. The theme this year was "Farm Safety is no accident". Bill Jessome, host of ATV contacted the chairman this summer and interviews were done with two farm families who had survived accidents.

../2

ACCIDENTS REPORTED

Agricultural Representatives across the province report farm accidents to our Committee. A total of 17 were reported in 1992. Although less than last year the number of fatalities has increased.

Tractor related	3	rollovers (3 fatalities) - these were non-farm but involved woodlot, tractors in a 1 other etc.
ATV	1	
Machinery	3	(1 fatality)
Livestock	5	(1 fatality)
Fall	3	(1 fatality)
Miscellaneous	1	

This list is by no means complete. We know many accidents go unreported. Our Committee continues to be challenged by the difficulty in accurately monitoring accidents.

APPRECIATION

On behalf of the committee thanks is extended to those organizations, businesses amd individuals who have supported our activities and programs during the past year.

We especially wish to commend the Farm Women's Comittee of the WINS for their leadership in organizing the 1991 Farm Health and Safety Competition.

The committee lost the services of a long time member in the passing of John Thomson last January. Another Committee member, Jack Hicks, retired from the public service earlier this year.

Respectfully submitted on behalf of the Committee.

George MacKenzie, Chairman
Susan Horne
Sandy Savage
Roy MacKenzie
Russell MacIntosh
Robert Priske
Lise LeBlanc
Elizabeth Crouse
Kevin Sibley
Robert Murray
Fred Walsh
Eric Fisher
Patrick Versteeg
Donna Langille

LIMESTONE

Limestone usage by Nova Scotia farmers in 1991 totalled 64,413 tons - down 18.4% from 1990. In the table below, limestone usage by county is set out with comparative figures for 1990,1989 and 1988 provided.

LIMESTONE USAGE BY COUNTY

COUNTY	1991	1990	1989	1988
Annapolis	4,248	3,576	4,532	4,353
Antigonish	5,993	7,636	6,270	6,929
Cape Breton	2,086	3,739	2,449	3,108
Colchester	7,501	10,018	11,862	9,663
Cumberland	8,730	9,939	14,043	9,242
Digby	237	519	503	393
Guysboro	292	504	463	141
Halifax	1,805	1,838	2,461	2,516
Hants	6,391	6,531	9,245	8,472
Inverness	3,621	5,198	3,989	3,238
Kings	12,993	18,548	19,599	17,282
Lunenburg	1,961	1,357	3,337	2,489
Pictou	6,646	7,399	6,372	6,234
Queens	120	167	361	69
Richmond	194	179	197	194
Shelburne	182	-	79	313
Victoria	961	772	91	256
Yarmouth	452	1,012	859	1,098
	64,413	78,932	86,712	75,990

NOVA SCOTIA DEPARTMENT OF AGRICULTURE & MARKETING
CAPITAL GRANTS SUMMARY REPORT
1991/92

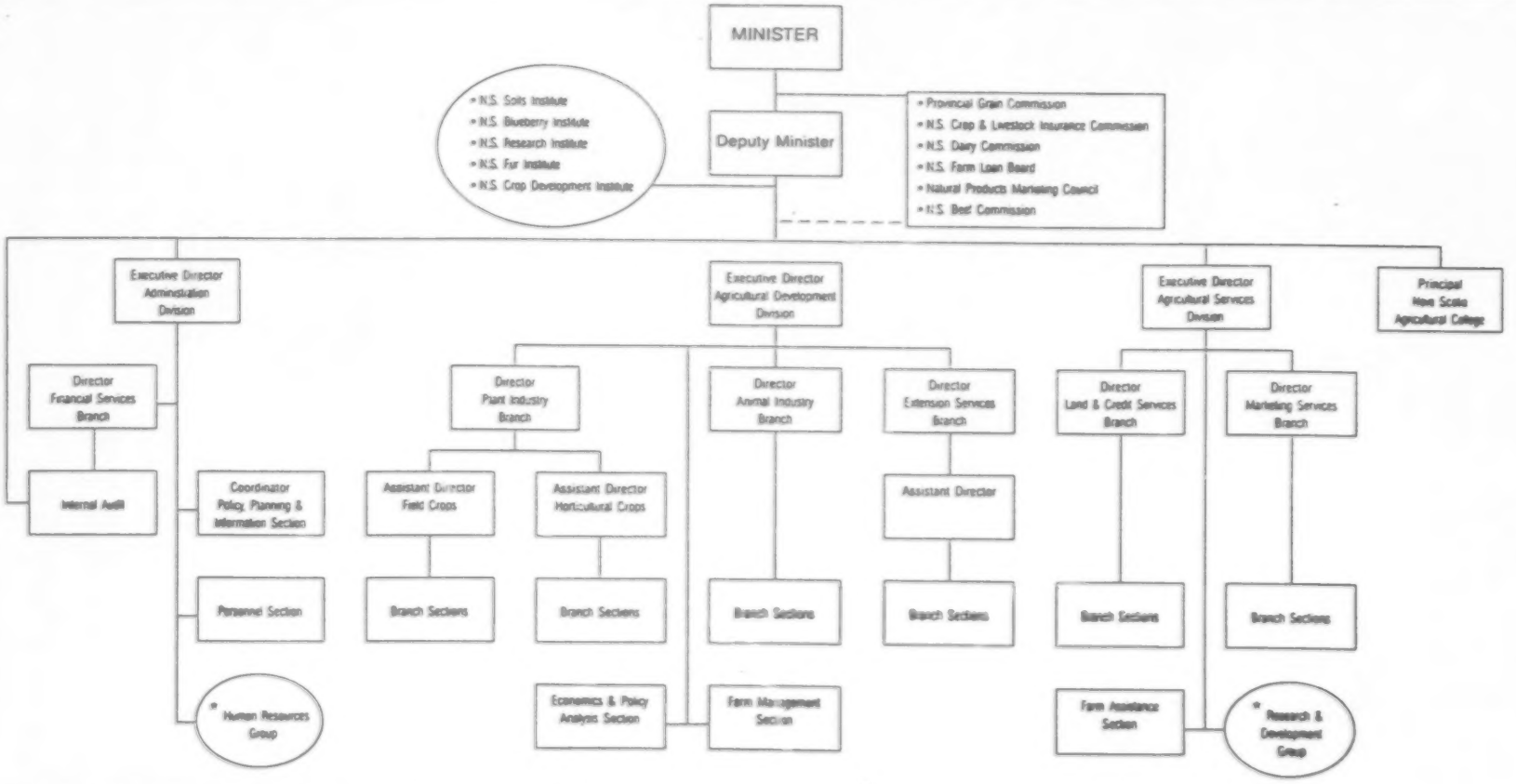
POLICY	UNITS APPLIED FOR	TOTAL ASSISTANCE APPROVED	TOTAL INVESTMENT	CLAIMED	UNITS CLAIMED
Dairy	82	429,458.15		176,609.10	59
Poultry	9	52,245.00		31,021.16	5
Machine Storage	41	141,452.37		58.953.48	21
General Storage	19	47,433.40		21,679.66	11
Hogs	29	151,547.00		91,596.57	24
Beef	2	17,777.25		9,035.25	2
Fur	5	1,100.00		1,078.48	5
Greenhouse	1	4,000.00		0.00	0
Field crops	2	4,950.95		3,788.80	2
Small Fruit	1	120.00		119.54	1
Vegetables	3	1,840.00		278.00	1
Woodlot	1	3,885.00		2,494.67	1
		855,809.12	2,334,899	396,654.71	
TOTAL A	195	855,809.12	2,334,899	396,629.00	132
B Farm Safety	59	85,910.00	73,034	35,173.00	30
C Pesticide	5	14,000.00	1,549	774.00	1
GRAND TOTALS	259	955,719.12	2,409,482	432,901.71	163

MANURE STORAGE SUMMARY REPORT

Section A	58	524,650.00	489,151.00	251,459.00	32
Section B	22	168,760.00	488,251.00	128,029.00	17
Section C	54	79,454.03	147,733.00	29,125.00	30
	134	772,864.03	1,125,135	408,614.00	79

Nova Scotia
Department of
Agriculture and Marketing

ORGANIZATIONAL CHART



* Not a permanently staffed section of the Department of Agriculture and Marketing

ORGANIZATIONAL CHART
EXTENSION SERVICES BRANCH